

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
83	12804667	gi 12804667 gb AAH01758.1 AAH01758 (BC001758) hypothetical protein FLJ20758 [Homo sapiens]	0.000000005
90	9795608	gi 9795608 gb AAF98426.1 AC021044_5 (AC021044) Unknown protein [Arabidopsis thaliana]	0.7
91	13631937	gi 13631937 ref XP_001412.3  metal-regulatory transcription factor 1 [Homo sapiens]	0.0004
92	14574479	gi 14574479 gb AAF60869.2  (AC024856) Hypothetical protein Y71G10AR.2 [Caenorhabditis elegans]	0.15
93	14970562	gi 14970562 emb CAC44371.1  (AJ292465) WDR9 protein, form A [Homo sapiens]	2E-16
98	12855751	gi 12855751 dbj BAB30445.1  (AK016814) putative [Mus musculus]	3.1
102	11498284	gi 11498284 ref NP_069510.1  adenylate kinase (adk) [Archaeoglobus fulgidus] sp O29581 KAD_ARCFU ADENYLATE KINASE (ATP-AMP TRANSPHOSPHORYLASE) pir  D69334 adenylate kinase (EC 2.7.4.3) - Archaeoglobus fulgidus gb AAB90565.1  (AE001058) adenylate kinase (adk) [Archaeoglobus fulgidus]	4.00E-13
104	9910248	gi 9910248 ref NP_064579.1  GL004 protein [Homo sapiens] gb AAF86949.1 AF226049_1 (AF226049) GL004 [Homo sapiens]	1.00E-85
105	7302191	gi 7302191 gb AAF57287.1  (AE003784) CG7856 gene product [Drosophila melanogaster]	1.00E+00
106	12005513	gi 12005513 gb AAG44486.1 AF246239_1 (AF246239) AD030 [Homo sapiens] gb AAG44658.1 AF258660_1 (AF258660) AD033 [Homo sapiens]	2.00E-73
108	13874435	gi 13874435 dbj BAB46923.1  (AB000782) cerebral protein-10 [Homo sapiens]	4.00E-04
109	14783375	gi 14783375 ref XP_045533.1  protein predicted by clone 23627 [Homo sapiens]	1.60E-01
110	7229532	gi 7229532 gb AAF42865.1 AF225924_1 (AF225924) staufer [Drosophila virilis]	3.30E+00
112	14775931	gi 14775931 ref XP_049935.1  hypothetical protein FLJ14950 [Homo sapiens]	3.00E-77
114	10140758	gi 10140758 gb AAG13589.1 AC051633_5 (AC051633) putative ubiquitin protein [Oryza sativa]	2.10E+00

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SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
115	421058	gi 421058 pir S34255 hypothetical protein 1a - Escherichia coli emb CAA51036.1  (X72295) ORF1a [Escherichia coli]	6.50E+00
116	14775931	gi 14775931 ref XP_049935.1  hypothetical protein FLJ14950 [Homo sapiens]	2.00E-74
117	14781316	gi 14781316 ref XP_032533.1  hypothetical protein FLJ12787 [Homo sapiens]	e-101
118	13161938	gi 13161938 emb CAC32991.1  (AJ309861) putative protein kinase WNK4 [Homo sapiens]	1.00E-30
119	7662028	gi 7662028 ref NP_055557.1  KIAA0255 gene product [Homo sapiens] ref XP_009540.1  KIAA0255 gene product [Homo sapiens] sp Q92544 T9S4_HUMAN TRANSMEMBRANE 9 SUPERFAMILY PROTEIN MEMBER 4 dbj BAA13385.1  (D87444) Similar to S.cerevisiae EMP70 protein precursor (S25110) [Homo sapiens] emb CAB75607.2  (AL049539) dJ836N17.2 (KIAA0255 protein) [Homo sapiens]	7.00E-14
120	10179324	gi 10179324 dbj BAB13674.1  (AB041351) type IV collagen alpha 6 chain [Mus musculus]	7.9
122	7160119	gi 7160119 emb CAB76306.1  (AL158057) putative acetyltransferase (fragment). [Streptomyces coelicolor A3(2)]	0.1
123	14732244	gi 14732244 ref XP_039960.1  PC3-96 protein [Homo sapiens] ref XP_039961.1  PC3-96 protein [Homo sapiens] pir T46276 hypothetical protein DKFZp564M1178.1 - human emb CAB70781.1  (AL137515) hypothetical protein [Homo sapiens] gb AAG35611.1 AF202092_1 (AF202092) PC3-96 [Homo sapiens]	9E-81
124	7020475	gi 7020475 dbj BAA91144.1  (AK000407) unnamed protein product [Homo sapiens]	2.6
125	14775931	gi 14775931 ref XP_049935.1  hypothetical protein FLJ14950 [Homo sapiens]	2E-72
127	226135	gi 226135 prf 1411303A GABA receptor alpha2 [Bos taurus]	0.046
136	4995818	gi 4995818 emb CAB44313.1  (AJ131899) proline rich synapse associated protein 1 [Rattus norvegicus]	0.00003



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SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
138	13357869	gi 13357869 ref NP_078143.1  unique hypothetical [Ureaplasma urealyticum] pir D82907 hypothetical protein UU309 [imported] - Ureaplasma urealyticum gb AAF30718.1 AE002128_6 (AE002128) unique hypothetical [Ureaplasma urealyticum]	2.7
139	1076802	gi 1076802 pir S49915 extensin-like protein - maize emb CAA84230.1  (Z34465) extensin-like protein [Zea mays] prf 2111476A extensin-like domain [Zea mays]	1.9
140	11466208	gi 11466208 ref NP_066531.1  NADH dehydrogenase subunit 4 [Naegleria gruberi] gb AAG17809.1 AF288092_34 (AF288092) NADH dehydrogenase subunit 4 [Naegleria gruberi]	6.6
145	7490290	gi 7490290 pir T38644 conserved hypothetical protein SPAC323.07c - fission yeast (Schizosaccharomyces pombe) emb CAB53410.1  (AL109988) conserved hypothetical protein; UPF0013 [Schizosaccharomyces pombe]	0.78
147	5813770	gi 5813770 gb AAD52006.1 AF017304_1 (AF017304) FMVIB [Morone saxatilis]	6.8
149	2497311	gi 2497311 sp P55803 MOG_BOVIN MYELIN-OLIGODENDROCYTE GLYCOPROTEIN PRECURSOR pir A47712 myelin/oligodendrocyte glycoprotein precursor - bovine	0.33
152	609342	gi 609342 gb AAA58698.1  (U04946) nucleophosmin-anaplastic lymphoma kinase fusion protein [Homo sapiens]	2.7
153	7481152	gi 7481152 pir T36795 probable penicillin acylase - Streptomyces coelicolor emb CAB46792.1  (AL096811) putative penicillin acylase [Streptomyces coelicolor A3(2)]	8

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SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
154	12229694	gi 12229694 sp O93830 BET2_CANAL TYPE II PROTEINS GERANYLGERANYLTRANSFERASE BETA SUBUNIT (TYPE II PROTEIN GERANYL-GERANYLTRANSFERASE BETA SUBUNIT) (GGTASE-II-BETA) (PGGT) (YPT1/SEC4 PROTEINS GERANYLGERANYLTRANSFERASE BETA SUBUNIT) dbj BAA35193.1  (AB021171) Beta subunit of geranylgeranyl transferase type2 [Candida albicans]	4.7
156	9630058	gi 9630058 ref NP_046276.1  unknown [Orgyia pseudotsugata single capsid nuclear polyhedrosis virus] sp O10359 Y120_NPVOP HYPOTHETICAL 9.3 KD PROTEIN (ORF120) pir T10389 hypothetical protein 120 - Orgyia pseudotsugata nuclear polyhedrosis virus gb AAC59119.1  (U75930) unknown [Orgyia pseudotsugata single capsid nuclear polyhedrosis virus]	8.5
157	9965966	gi 9965966 gb AAG10219.1 AF294433_1 (AF294433) coat protein [Alfalfa mosaic virus]	7
158	7296047	gi 7296047 gb AAF51343.1  (AE003585) CG17711 gene product [Drosophila melanogaster]	4.6
161	13507856	gi 13507856 ref NP_109805.1  ribosomal protein L20 [Mycoplasma pneumoniae] sp P78023 RL20_MYCPN 50S RIBOSOMAL PROTEIN L20 pir S73363 ribosomal protein L20 - Mycoplasma pneumoniae (strain ATCC 29342) gb AAG34734.1 AE000004_3 (AE000004) ribosomal protein L20 [Mycoplasma pneumoniae]	0.86
162	8393641	gi 8393641 ref NP_058889.1  kynurenine aminotransferase II [Rattus norvegicus] emb CAA90507.1  (Z50144) kynurenine/alpha-aminoadipate aminotransferase [Rattus norvegicus]	4.2
169	1515448	gi 1515448 gb AAC45559.1  (U63096) Description: pBF4 gene involved in Bacteroides spp. conjugal transfer [Bacteroides fragilis]	2.6
175	422832	gi 422832 pir B46629 mucin 6, gastric (3-repeat clone) - human (fragment) gb AAB61945.1  (L07518) mucin [Homo sapiens]	3.2

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SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
176	7504075	gi 7504075 pir T22584 hypothetical protein F53F4.6 - <i>Caenorhabditis elegans</i> emb CAB01215.1  (Z77663) F53F4.6 [ <i>Caenorhabditis elegans</i> ]	6.6
178	13385538	gi 13385538 ref NP_080316.1  RIKEN cDNA 2810036K01 gene [ <i>Mus musculus</i> ] dbj BAB28520.1  (AK012865) putative [ <i>Mus musculus</i> ]	2E-48
180	902377	gi 902377 gb AAA82981.1  (U18059) polyprotein [pestivirus type 1]	0.53
181	13421499	gi 13421499 gb AAK22335.1  (AE005708) conserved hypothetical protein [ <i>Caulobacter crescentus</i> ]	6.2
187	10803574	gi 10803574 ref NP_045972.1  GvpN [ <i>Halobacterium</i> sp. NRC-1] sp Q9HI16 GVN1_HALN1 GVPN PROTEIN 1 pir A47053 gas-vesicle operon protein gvpN [imported] - <i>Halobacterium salinarum</i> pir T08244 gas-vesicle operon protein gvpN - <i>Halobacterium</i> sp. (strain NRC-1) plasmid pNRC100 gb AAC82811.1  (AF016485) GvpN [ <i>Halobacterium</i> sp. NRC-1] gb AAD15044.1  (L03361) gas vesicle protein [Plasmid pNRC100] gb AAG20728.1  (AE005142) GvpN protein, cluster A; GvpN1 [ <i>Halobacterium</i> sp. NRC-1]	7.40E-01
192	7662532	gi 7662532 ref NP_054838.1  PRO0195 protein [ <i>Homo sapiens</i> ] gb AAF24025.1 AF090901_1 (AF090901) PRO0195 [ <i>Homo sapiens</i> ]	2.60E-01
194	5360226	gi 5360226 dbj BAA36472.1  (AB015177) F0-ATPase subunit 6 [ <i>Beta vulgaris</i> ]	2.3
196	3024921	gi 3024921 sp Q58312 Y902_METJA HYPOTHETICAL PROTEIN MJ0902 pir F64412 hypothetical protein MJ0902 - <i>Methanococcus jannaschii</i> gb AAB98907.1  (U67533) <i>M. jannaschii</i> predicted coding region MJ0902 [ <i>Methanococcus jannaschii</i> ]	6.5
198	7522108	gi 7522108 pir T29097 pro-pol-dUTPase polyprotein - murine endogenous retrovirus ERV-L (fragment) emb CAA73251.1  (Y12713) protease; reverse transcriptase; RNaseH; integrase; dUTPase; Pro-Pol-dUTPase polyprotein [ <i>Mus musculus</i> ]	1.7

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SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
199	9955592	gi 9955592 emb CAC00653.1  (AJ292519) N-acylamino acid racemase [ <i>Amycolatopsis orientalis</i> subsp. <i>lurida</i> ]	4.5
203	4097932	gi 4097932 gb AAD10321.1  (U72240) unknown [ <i>Choristoneura fumiferana</i> nucleopolyhedrovirus]	6.5
205	11252252	gi 11252252 pir D82079 pyruvate dehydrogenase, E1 component VC2414 [imported] - <i>Vibrio cholerae</i> (group O1 strain N16961) gb AAF95557.1  (AE004311) pyruvate dehydrogenase, E1 component [ <i>Vibrio cholerae</i> ]	3.5
206	12963481	gi 12963481 ref NP_061927.1  hypothetical protein MGC5560; hypothetical protein [ <i>Homo sapiens</i> ] dbj BAB14342.1  (AK022978) unnamed protein product [ <i>Homo sapiens</i> ]	3E-73
207	14737646	gi 14737646 ref XP_038048.1  similar to APICAL ENDOSOMAL GLYCOPROTEIN PRECURSOR (R. norvegicus) [ <i>Homo sapiens</i> ]	4
209	14742770	gi 14742770 ref XP_039393.1  KIAA1550 protein [ <i>Homo sapiens</i> ]	8.4
213	12643499	gi 12643499 sp P89202 RRPO_SHMV RNA-DIRECTED RNA POLYMERASE (186 KDA PROTEIN) [CONTAINS: METHYLTRANSFERASE/RNA HELICASE (MT/HEL) (128 KDA PROTEIN)]	6.5
223	9629141	gi 9629141 ref NP_044299.1  putative transport protein [ <i>Soybean chlorotic mottle virus</i> ] sp P15631 VMP_SOCMV MOVEMENT PROTEIN (CELL-TO-CELL TRANSPORT PROTEIN) (ORF IA) pir JS0379 hypothetical 35.5K protein - soybean chlorotic mottle virus emb CAA33833.1  (X15828) putative transport protein [ <i>Soybean chlorotic mottle virus</i> ]	4.3
226	7494266	gi 7494266 pir T18485 hypothetical protein C0840w - malaria parasite ( <i>Plasmodium falciparum</i> ) emb CAB11124.1  (Z98551) putative P-type ATPase [ <i>Plasmodium falciparum</i> ]	2.3
228	14042283	gi 14042283 dbj BAB55184.1  (AK027535) unnamed protein product [ <i>Homo sapiens</i> ]	2E-30
229	14744326	gi 14744326 ref XP_044812.1  NIMA (never in mitosis gene a)-related kinase 6 [ <i>Homo sapiens</i> ]	4E-13
232	98014	gi 98014 pir S11148 amiA protein - <i>Streptococcus pneumoniae</i>	10

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SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
233	10178317	gi 10178317 emb CAC08403.1  (AL121928) bA18I14.5.1 (novel protein isoform 1) [Homo sapiens]	7
234	630444	gi 630444 pir  S43955 probable NADH dehydrogenase (ubiquinone) (EC 1.6.5.3) chain 3, kinetoplast - Trypanosoma brucei mitochondrion (fragment) gb AAA20887.1  (L26251) CR5 [Trypanosoma brucei]	6.2
239	7505826	gi 7505826 pir  T25816 hypothetical protein K12D9.2 - Caenorhabditis elegans	1.4
240	7434912	gi 7434912 pir  H71934 phosphatidylglycerophosphate synthase - Helicobacter pylori (strain J99) gb AAD05990.1  (AE001475) PHOSPHATIDYLGLYCEROPHOSPHATE SYNTHASE [Helicobacter pylori J99]	5.8
243	6136155	gi 6136155 sp O70546 UTX_MOUSE UBIQUITOUSLY TRANSCRIBED X CHROMOSOME TETRATRICOPEPTIDE REPEAT PROTEIN (UBIQUITOUSLY TRANSCRIBED TPR PROTEIN ON THE X CHROMOSOME) emb CAA05692.1  (AJ002730) UTX [Mus musculus]	8.90E+00
246	2143962	gi 2143962 pir  I59422 rsec8 - rat (fragment) gb AAC52265.1  (U32498) rsec8 [Rattus norvegicus]	1E-93
250	6136155	gi 6136155 sp O70546 UTX_MOUSE UBIQUITOUSLY TRANSCRIBED X CHROMOSOME TETRATRICOPEPTIDE REPEAT PROTEIN (UBIQUITOUSLY TRANSCRIBED TPR PROTEIN ON THE X CHROMOSOME) emb CAA05692.1  (AJ002730) UTX [Mus musculus]	7.1

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SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
255	12737603	gi 12737603 ref XP_006839.2  activin A receptor type II-like 1 [Homo sapiens] ref XP_050707.1  activin A receptor type II-like 1 [Homo sapiens] sp P37023 KIR3_HUMAN SERINE/THREONINE-PROTEIN KINASE RECEPTOR R3 PRECURSOR (SKR3) (ACTIVIN RECEPTOR-LIKE KINASE 1) (ALK-1) (TGF-B SUPERFAMILY RECEPTOR TYPE I) (TSR-I) pir A49431 activin/TGF-beta-like type I receptor - human gb AAA16160.1  (L17075) TGF-b superfamily receptor type I [Homo sapiens] gb AAB61900.1  (U77713) activin receptor like kinase 1 [Homo sapiens]	7.50E+00
265	2133974	gi 2133974 pir S68425 SoxP1 protein - rainbow trout dbj BAA11868.1  (D83256) SoxP1 [Oncorhynchus mykiss]	0.18
266	9838427	gi 9838427 ref NP_064041.1  orf214 [Beta vulgaris]	2.2
268	5731737	gi 5731737 dbj BAA83337.1  (AB021878) similar to yeast sodium/proton exchanger [Oryza sativa]	3.3
271	13642312	gi 13642312 ref XP_002895.2  parathyroid hormone receptor 1 [Homo sapiens] ref XP_033742.1  parathyroid hormone receptor 1 [Homo sapiens] ref XP_033743.1  parathyroid hormone receptor 1 [Homo sapiens]	9
272	11545138	gi 11545138 emb CAC08390.2  (AL121886) dJ1028D15.1 (continued from dJ138B7.1 in Em:Z98752) [Homo sapiens]	0.0000008
275	6323677	gi 6323677 ref NP_013748.1  Ymr034cp [Saccharomyces cerevisiae] sp Q05131 YMS4_YEAST HYPOTHETICAL 48.4 KD PROTEIN IN ARP9-IMP2 INTERGENIC REGION pir S53951 probable membrane protein YMR034c - yeast (Saccharomyces cerevisiae) emb CAA89150.1  (Z49213) unknown [Saccharomyces cerevisiae]	6.6
277	7297043	gi 7297043 gb AAF52312.1  (AE003612) CG13992 gene product [Drosophila melanogaster]	8.1
282	1616595	gi 1616595 emb CAA41710.1  (X58907) steroid 21-monooxygenase [Homo sapiens]	6.8
283	14089610	gi 14089610 emb CAC13370.1  (AL445563) unknown; predicted coding region [Mycoplasma pulmonis]	2.1

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SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
284	139809	gi 139809 sp P27571 XIST_MOUSE X INACTIVE SPECIFIC TRANSCRIPT PROTEIN pir S15433 hypothetical protein - mouse emb CAA41978.1  (X59289) ORF [Mus musculus] prf 1711440A xist gene [Mus musculus]	0.18
285	11355576	gi 11355576 pir T44331 hypothetical protein wblD [imported] - Vibrio cholerae dbj BAA33635.1  (AB012957) probable NADH dehydrogenase [Vibrio cholerae]	0.23
297	14389443	gi 14389443 ref NP_116776.1  NADH dehydrogenase subunit 4 [Rana nigromaculata] dbj BAB58996.1  (AB043889) NADH dehydrogenase subunit 4 [Rana nigromaculata]	9.2
300	4493987	gi 4493987 emb CAB39046.1  (AL034559) hypothetical protein, PFC1030w [Plasmodium falciparum]	2.1
306	7494200	gi 7494200 pir T18434 hypothetical protein C0375c - malaria parasite (Plasmodium falciparum) emb CAB11111.1  (Z98547) predicted using hexExon; MAL3P3.10 (PFC0375c), Homologue of C.elegans T08A11.2 protein, len: 1387 aa; Similarity to C.elegans T08A11.2 protein. C.elegans T08A11.2 protein (WP:T08A11.2) BLAST Score: 2901, sum P(2) = 0.0; 66% identity in 839 aa >	1.3
308	10728064	gi 10728064 gb AAF50455.2  (AE003556) CG7060 gene product [Drosophila melanogaster]	4.7
317	9631682	gi 9631682 ref NP_048461.1  a113L [Paramecium bursaria Chlorella virus 1] pir T17603 hypothetical protein a113L - Chlorella virus PBCV-1 gb AAC96481.1  (U42580) a113L [Paramecium bursaria Chlorella virus 1]	7.7
318	4733986	gi 4733986 gb AAD28666.1 AC007209_2 (AC007209) hypothetical protein [Arabidopsis thaliana]	5.30E+00
319	461649	gi 461649 sp Q05004 BB61_RABIT BRUSH BORDER 61.9 KD PROTEIN PRECURSOR pir B45665 adult-specific 61.9K brush border protein precursor - rabbit emb CAA78302.1  (Z12840) protein of unknown function [Oryctolagus cuniculus]	3.00E-16

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SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
322	11466552	gi 11466552 ref NP_044801.1  NADH dehydrogenase, subunit 4 [Reclinomonas americana] pir S78183 NADH dehydrogenase (ubiquinone) (EC 1.6.5.3) chain 4 - Reclinomonas americana (ATCC 50394) mitochondrion gb AAD11916.1  (AF007261) NADH dehydrogenase, subunit 4 [Reclinomonas americana]	9.1
323	13603897	gi 13603897 gb AAK31986.1 AF295594_1 (AF295594) SKTx1 precursor [Buthus martensii]	9.3
325	11497767	gi 11497767 ref NP_068989.1  hypothetical protein [Archaeoglobus fulgidus] sp O30087 Y150_ARCFU HYPOTHETICAL PROTEIN AF0150 pir F69268 hypothetical protein AF0150 - Archaeoglobus fulgidus gb AAB91087.1  (AE001096) A. fulgidus predicted coding region AF0150 [Archaeoglobus fulgidus]	7.1
332	7506939	gi 7506939 pir T24356 hypothetical protein T02D1.3 - Caenorhabditis elegans emb CAB05908.1  (Z83319) T02D1.3 [Caenorhabditis elegans]	3.9
336	7510675	gi 7510675 pir T29689 hypothetical protein ZC266.2 - Caenorhabditis elegans gb AAA96101.1  (U53140) ZC266.2 gene product [Caenorhabditis elegans]	2.4
337	12697923	gi 12697923 dbj BAB21780.1  (AB051476) KIAA1689 protein [Homo sapiens]	3E-21
338	630465	gi 630465 pir S47042 protein kinase (EC 2.7.1.37) cdc2-related 1 - malaria parasite (Plasmodium falciparum)	5.7
340	7488318	gi 7488318 pir T01191 RNA-directed DNA polymerase homolog F21E10.5 - Arabidopsis thaliana gb AAC13599.1  (AF058914) similar to reverse transcriptase (Pfam: transcript_fact.hmm, score: 72.31) [Arabidopsis thaliana]	5
341	5804818	gi 5804818 emb CAB52872.1  (AL021712) putative protein [Arabidopsis thaliana] emb CAB79171.1  (AL161556) putative protein [Arabidopsis thaliana]	5
343	14579376	gi 14579376 gb AAK69253.1 AF336309_48 (AF336309) SpyB [Yersinia enterocolitica]	8.2



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SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
344	11284162	gi 11284162 pir  H81077 hypothetical protein NMB1490 [imported] - Neisseria meningitidis (group B strain MD58) gb AAF41846.1  (AE002498) hypothetical protein [Neisseria meningitidis MC58]	3
347	11361512	gi 11361512 pir  H82781 hypothetical protein XF0626 [imported] - Xylella fastidiosa (strain 9a5c) gb AAF83436.1 AE003908_4 (AE003908) hypothetical protein [Xylella fastidiosa 9a5c]	7.6
348	7497054	gi 7497054 pir  T19739 hypothetical protein C35A5.4 - Caenorhabditis elegans emb CAA94905.1  (Z71185) contains similarity to Pfam domain: PF00635 (MSP (Major sperm protein) domain), Score=66.4, E-value=2e-16, N=1 [Caenorhabditis elegans]	0.064
349	6531601	gi 6531601 gb AAF15500.1  (AF167672) immunoglobulin heavy chain variable region [Homo sapiens]	1.6
352	12858471	gi 12858471 dbj BAB31327.1  (AK018655) putative [Mus musculus]	3.9
353	2128157	gi 2128157 pir  C64319 hypothetical protein MJ0154 - Methanococcus jannaschii	0.98
355	14195575	gi 14195575 sp P58114 YV78_CAUCR HYPOTHETICAL PROTEIN CC3178 gb AAK25140.1  (AE005981) pirin-related protein [Caulobacter crescentus]	4.20E+00
359	7468435	gi 7468435 pir  B72015 metalloproteinase, insulinase family CP0903 [imported] - Chlamydomonas reinhardtii (strains CWL029 and AR39) gb AAD19093.1  (AE001675) Insulinase family/Protease III [Chlamydomonas reinhardtii CWL029] gb AAF38689.1  (AE002249) metalloproteinase, insulinase family [Chlamydomonas reinhardtii AR39] dbj BAA99165.1  (AP002548) insulinase family/protease III [Chlamydomonas reinhardtii J138]	4.1
360	461649	gi 461649 sp Q05004 BB61_RABIT BRUSH BORDER 61.9 KD PROTEIN PRECURSOR pir  B45665 adult-specific 61.9K brush border protein precursor - rabbit emb CAA78302.1  (Z12840) protein of unknown function [Oryctolagus cuniculus]	8E-45

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363	12859685	gi 12859685 dbj BAB31736.1  (AK019464) putative [Mus musculus]	6.1
365	11055982	gi 11055982 ref NP_067633.1  PR domain containing 13; PR-domain containing protein 13 [Homo sapiens] ref XP_011460.1  PR domain containing 13 [Homo sapiens] gb AAG13448.1  (AY004253) PR-domain containing protein 13 [Homo sapiens]	3.4
368	3915305	gi 3915305 sp Q96597 VP5_AHSV9 OUTER CAPSID PROTEIN VP5 gb AAB17570.1  (U74489) VP5 [African horse sickness virus]	0.63
370	11466986	gi 11466986 ref NP_041893.1  Orf635 [Euglena gracilis] sp P31916 YCX3_EUGGR HYPOTHETICAL 78.0 KD PROTEIN IN PSBC INTRON 2 (ORF635) emb CAA50080.1  (X70810) Orf635 [Euglena gracilis]	1.7
373	14766918	gi 14766918 ref XP_034599.1  acid sphingomyelinase-like phosphodiesterase [Homo sapiens]	2E-99
375	5732610	gi 5732610 gb AAD49190.1 AF115423_2 (AF115423) core protein [Hepatitis B virus]	3.4
377	2707661	gi 2707661 gb AAB94699.1  (AF029934) IgM heavy chain VDJ region [Oryctolagus cuniculus]	4.7
379	7516819	gi 7516819 pir C72580 hypothetical protein APE1923 - Aeropyrum pernix (strain K1) dbj BAA80928.1  (AP000062) 105aa long hypothetical protein [Aeropyrum pernix]	6.80E+00
380	3859670	gi 3859670 emb CAA22008.1  (AL033502) hypothetical membrane protein [Candida albicans]	9.90E+00
382	14784562	gi 14784562 ref XP_040415.1  mutL (E. coli) homolog 3 [Homo sapiens] gb AAF23905.1  (AF195658) DNA mismatch repair protein [Homo sapiens]	2E-25
383	14194519	gi 14194519 sp Q9K920 CMGB_BACHD COMG OPERON PROTEIN 2 HOMOLOG dbj BAB06550.1  (AP001516) DNA transport machinery [Bacillus halodurans]	2.7
386	7509624	gi 7509624 pir T26676 hypothetical protein Y38F1A.1 - Caenorhabditis elegans emb CAA21628.1  (AL032639) predicted using Genefinder~cDNA EST EMBL:AW057282 comes from this gene [Caenorhabditis elegans]	9.4

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
388	7508443	gi 7508443 pir T25281 hypothetical protein T25E12.11 - Caenorhabditis elegans emb CAB04829.1  (Z82052) contains similarity to Pfam domain: PF01827 (Domain of unknown function), Score=130.6, E-value=4.6e-36, N=1 [Caenorhabditis elegans]	3.4
389	7295832	gi 7295832 gb AAF51133.1  (AE003580) CG3347 gene product [Drosophila melanogaster]	0.032
390	7510359	gi 7510359 pir T27283 hypothetical protein Y64G10A.f - Caenorhabditis elegans	8.2
395	6679381	gi 6679381 ref NP_032903.1  plasminogen [Mus musculus] sp P20918 PLMN_MOUSE PLASMINOGEN PRECURSOR [CONTAINS: ANGIOSTATIN] pir PLMS plasmin (EC 3.4.21.7) precursor - mouse gb AAA50168.1  (J04766) plasminogen [Mus musculus]	2.2
396	8479518	gi 8479518 sp Q89853 VGP_EBORS STRUCTURAL GLYCOPROTEIN PRECURSOR (VIRION SPIKE GLYCOPROTEIN) [CONTAINS: GP1; GP2] gb AAC54889.1  (U23416) virion spike glycoprotein [Ebola virus] gb AAC54891.1  (U23417) virion spike glycoprotein [Ebola virus]	3.1
403	14133247	gi 14133247 dbj BAA86564.2  (AB033076) KIAA1250 protein [Homo sapiens]	6E-19
412	3293234	gi 3293234 gb AAC25913.1  (U96413) T-DNA oncoprotein [Agrobacterium tumefaciens]	9.1
415	7023033	gi 7023033 dbj BAA91809.1  (AK001649) unnamed protein product [Homo sapiens]	9E-85
416	12514130	gi 12514130 gb AAG55434.1 AE005285_1 (AE005285) putative oxidoreductase [Escherichia coli O157:H7 EDL933] dbj BAB34455.1  (AP002554) putative oxidoreductase [Escherichia coli O157:H7]	9.40E-01
418	4514359	gi 4514359 dbj BAA75394.1  (AB013377) ComGB [Bacillus halodurans]	2.6
419	7510324	gi 7510324 pir T27250 hypothetical protein Y5F2A.3 - Caenorhabditis elegans emb CAA21648.1  (AL032641) Y5F2A.3 [Caenorhabditis elegans]	1.6

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
421	6981358	gi 6981358 ref NP_037137.1  phosphoinositide 3-kinase p85 (other splicing variants: p55 and p50) [Rattus norvegicus] sp Q63787 P85A_RAT PHOSPHATIDYLINOSITOL 3-KINASE REGULATORY ALPHA SUBUNIT (PI3-KINASE P85-ALPHA SUBUNIT) (PTDINS-3-KINASE P85-ALPHA) (PI3K) dbj BAA18932.1  (D64045) phosphatidylinositol 3-kinase p85 alpha subunit [Rattus norvegicus]	2.4
423	6576738	gi 6576738 dbj BAA88337.1  (AB005891) ORF2 [Platemys spixii]	3.4
424	6739553	gi 6739553 gb AAF27299.1  (AF146429) DeltaC [Danio rerio]	3.9
425	13816283	gi 13816283 gb AAK43020.1  (AE006883) Sulfate adenylyltransferase (sat) [Sulfolobus solfataricus]	3.6
428	11034774	gi 11034774 gb AAG27071.1 AF105225_7 (AF030414) NifQ [Gluconacetobacter diazotrophicus]	3.6
433	13364676	gi 13364676 dbj BAB38622.1  (AP002568) hypothetical protein [Escherichia coli O157:H7]	5.8
434	12845784	gi 12845784 dbj BAB26898.1  (AK010380) putative [Mus musculus]	0.075
435	12513917	gi 12513917 gb AAG55266.1 AE005270_2 (AE005270) Z1121 gene product [Escherichia coli O157:H7 EDL933] gb AAG55675.1 AE005306_4 (AE005306) Z1560 gene product [Escherichia coli O157:H7 EDL933] dbj BAB34723.1  (AP002554) putative membrane protein [Escherichia coli O157:H7]	8.3
436	7661654	gi 7661654 ref NP_056444.1  DKFZP566J153 protein [Homo sapiens] emb CAB43677.1  (AL050369) hypothetical protein [Homo sapiens]	0.42
437	1150678	gi 1150678 emb CAA50971.1  (X72086) ORF20R; B21R in citation [3] [Variola virus]	5.10E+00
438	8928456	gi 8928456 sp O51039 Y006_BORBU HYPOTHETICAL PROTEIN BB0006 pir F70100 conserved hypothetical integral membrane protein BB0006 - Lyme disease spirochete gb AAC66397.1  (AE001115) conserved hypothetical integral membrane protein [Borrelia burgdorferi]	4.2
440	7297273	gi 7297273 gb AAF52536.1  (AE003618) Myo28B1 gene product [Drosophila melanogaster]	3.3

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
448	7495690	gi 7495690 pir T19090 hypothetical protein C08F11.3 - <i>Caenorhabditis elegans</i> emb CAB05674.1  (Z83216) C08F11.3 [ <i>Caenorhabditis elegans</i> ]	4.9
449	10438579	gi 10438579 dbj BAB15281.1  (AK025916) unnamed protein product [ <i>Homo sapiens</i> ]	3.7
451	112200	gi 112200 pir A32868 prolactin receptor - rat (fragments)	8.6
452	114987	gi 114987 sp P17885 BIMA_EMENI BIMA PROTEIN pir A53256 nuclear protein bimA - <i>Emericella nidulans</i> emb CAA41959.1  (X59269) bimA [ <i>Emericella nidulans</i> ]	6.60E+00
457	4885039	gi 4885039 gb AAD31932.1 U00058_6 (U00058) contains similarity to DNAJ domains (Pfam: PF00226, Score=44.9, E=1.8e-09, N=1) [ <i>Caenorhabditis elegans</i> ]	4.3
459	4505121	gi 4505121 ref NP_003916.1  methyl-CpG binding domain protein 4; 3,N(4)-ethenocytosine glycosylase; G/T mismatch glycosylase; G/U mismatch glycosylase; G/5-fluorouracil mismatch glycosylase with biphasic kinetics [ <i>Homo sapiens</i> ] gb AAC68879.1  (AF072250) methyl-CpG binding protein MBD4 [ <i>Homo sapiens</i> ] gb AAD22195.1 AF114784_1 (AF114784) methyl-CpG binding endonuclease [ <i>Homo sapiens</i> ] gb AAD50374.1  (AF120999) methyl-CpG binding protein 4 [ <i>Homo sapiens</i> ]	2.1
463	12644455	gi 12644455 sp Q60751 IGIR_MOUSE INSULIN-LIKE GROWTH FACTOR I RECEPTOR PRECURSOR gb AAC12782.1  (AF056187) insulin-like growth factor I receptor; IGF-I receptor [ <i>Mus musculus</i> ]	3.1
465	11465398	gi 11465398 ref NP_045211.1  unknown; N-acetyl-glutamate-gamma-semialdehyde dehydrogenase [ <i>Cyanidium caldarium</i> ] sp Q9TLQ8 HIS5_CYACA AMIDOTRANSFERASE HISH gb AAF12883.1 AF022186_5 (AF022186) unknown; N-acetyl-glutamate-gamma-semialdehyde dehydrogenase [ <i>Cyanidium caldarium</i> ]	5
466	5761329	gi 5761329 dbj BAA83473.1  (AB004819) cysteine endopeptidase [ <i>Oryza sativa</i> ]	5.70E+00

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
468	5306243	gi 5306243 gb AAD41976.1 AC006438_8 (AC006438) hypothetical protein [Arabidopsis thaliana]	4.2
470	7304025	gi 7304025 gb AAF59067.1  (AE003836) CG8639 gene product [Drosophila melanogaster]	3.20E-01
473	7303724	gi 7303724 gb AAF58773.1  (AE003829) lola gene product [alt 2] [Drosophila melanogaster] gb AAF58774.1  (AE003829) lola gene product [alt 3] [Drosophila melanogaster] gb AAF58775.1  (AE003829) lola gene product [alt 4] [Drosophila melanogaster] gb AAF58776.1  (AE003829) lola gene product [alt 5] [Drosophila melanogaster]	5.8
476	1098549	gi 1098549 gb AAA82594.1  (U25703) immunoglobulin light chain F class [Ictalurus punctatus]	7
477	4262231	gi 4262231 gb AAD14524.1  (AC006200) hypothetical protein [Arabidopsis thaliana]	3.8
478	5834894	gi 5834894 ref NP_006964.1 ND5_10021 NADH dehydrogenase subunit 5 [Caenorhabditis elegans] sp P24896 NU5M_CAEEL NADH-UBIQUINONE OXIDOREDUCTASE CHAIN 5 pir S26037 NADH dehydrogenase (ubiquinone) (EC 1.6.5.3) chain 5 - Caenorhabditis elegans mitochondrion emb CAA38162.1  (X54252) ND5 protein (AA 1 - 527) [Caenorhabditis elegans]	0.23
480	14776608	gi 14776608 ref XP_033588.1  BAI1-associated protein 3 [Homo sapiens]	8.6
482	7448960	gi 7448960 pir D72417 conserved hypothetical protein - Thermotoga maritima (strain MSB8) gb AAD35211.1 AE001697_11 (AE001697) conserved hypothetical protein [Thermotoga maritima]	9.1
484	7497960	gi 7497960 pir T15840 hypothetical protein C54G7.3 - Caenorhabditis elegans gb AAA81392.1  (U40410) coded for by C. elegans cDNA yk9e10.5; coded for by C. elegans cDNA yk9e10.3; multiple regions of similarity to EGF-like repeats and cysteine-rich repeats [Caenorhabditis elegans]	5
487	14720884	gi 14720884 ref XP_032180.1  hypothetical protein DKFZp434A171 [Homo sapiens]	7.7
490	3201900	gi 3201900 gb AAC19365.1  (AF067420) SNC73 protein [Homo sapiens]	0.28

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
493	12018149	gi 12018149 gb AAG45421.1 AF309495_1 (AF309495) gamete-specific hydroxyproline-rich glycoprotein a2 [Chlamydomonas reinhardtii]	3.7
494	467634	gi 467634 emb CAA82856.1  (Z29969) HLY 4 [Entamoeba histolytica]	8.9
498	14726914	gi 14726914 ref XP_037105.1  KIAA0622 protein; Drosophila 'multiple asters' (Mast)-like homolog 1 [Homo sapiens]	6.8
499	11692583	gi 11692583 gb AAG39888.1 AF282303_1 (AF282303) odorant receptor M34 [Mus musculus]	9.5
502	7303064	gi 7303064 gb AAF58132.1  (AE003810) CG12960 gene product [Drosophila melanogaster]	4.9
504	13701254	gi 13701254 dbj BAB42549.1  (AP003133) ORFID:SA1289~hypothetical protein, similar to bifunctional biotin ligase/biotin operon repressor [Staphylococcus aureus subsp. aureus N315] dbj BAB57618.1  (AP003362) hypothetical protein [Staphylococcus aureus subsp. aureus Mu50]	5.9
505	137073	gi 137073 sp P17086 URE1_PROMI UREASE ALPHA SUBUNIT (UREA AMIDOHYDROLASE) pir D43719 urease (EC 3.5.1.5) 62K chain - Proteus mirabilis gb AAA25669.1  (M31834) urease subunit C [Proteus mirabilis]	8.5
512	14548038	gi 14548038 sp Q9D952 EVPL_MOUSE ENVOPLAKIN (P210) (210 KDA CORNIFIED ENVELOPE PRECURSOR) emb CAC38864.2  (AJ309317) envoplakin [Mus musculus]	4.2
516	14031018	gi 14031018 gb AAK50523.1  (AY029684) NADH dehydrogenase F [Stenotaphrum secundatum]	4.6
518	14600836	gi 14600836 ref NP_147359.1  hypothetical protein [Aeropyrum pernix] pir D72647 hypothetical protein APE0610 - Aeropyrum pernix (strain K1) dbj BAA79580.1  (AP000060) 376aa long hypothetical protein [Aeropyrum pernix]	2.8

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
519	4930062	gi 4930062 pdb 1MAA D Chain D, Mouse Acetylcholinesterase Catalytic Domain, Glycosylated Protein pdb 1MAA A Chain A, Mouse Acetylcholinesterase Catalytic Domain, Glycosylated Protein pdb 1MAA C Chain C, Mouse Acetylcholinesterase Catalytic Domain, Glycosylated Protein pdb 1MAA B Chain B, Mouse Acetylcholinesterase Catalytic Domain, Glycosylated Protein	8.8
522	9757603	gi 9757603 dbj BAB08147.1  (AB030877) maturase [Lilium mackliniae]	0.62
526	7445887	gi 7445887 pir T07052 probable potassium channel protein SKT2 - potato emb CAA70870.1  (Y09699) putative inward rectifying potassium channel [Solanum tuberosum]	2.1
528	2897832	gi 2897832 dbj BAA24910.1  (AB000134) cytochrome oxidase subunit I [Prorocentrum micans]	9.8
537	7446379	gi 7446379 pir T14039 protein kinase (EC 2.7.1.37), myotonic dystrophy-associated - rat gb AAC02941.1  (AF021935) myotonic dystrophy kinase-related Cdc42- binding kinase [Rattus norvegicus]	8E-52
544	14779648	gi 14779648 ref XP_027140.1  hypothetical protein FLJ23239 [Homo sapiens]	6.3
546	7292503	gi 7292503 gb AAF47906.1  (AE003481) CG15023 gene product [Drosophila melanogaster]	6.3
548	4758758	gi 4758758 ref NP_004529.1  nucleosome assembly protein 1-like 3 [Homo sapiens] sp Q99457 NPL3_HUMAN NUCLEOSOME ASSEMBLY PROTEIN 1-LIKE 3 dbj BAA08904.1  (D50370) nucleosome assembly protein [Homo sapiens]	1.6
554	14530412	gi 14530412 emb CAC42291.1  (Z69360) cDNA EST EMBL:U52071 comes from this gene [Caenorhabditis elegans]	7
559	6680788	gi 6680788 ref NP_031576.1  Bloom syndrome protein homolog (human) [Mus musculus] sp O88700 BLM_MOUSE BLOOM'S SYNDROME PROTEIN HOMOLOG emb CAB10933.1  (Z98263) BLM protein [Mus musculus]	4.8



Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
560	3294495	gi 3294495 gb AAC25822.1  (AF038608) contains similarity to Mus musculus tumor susceptibility protein TSG101 (GB:U52945) [Caenorhabditis elegans]	0.78
561	6319273	gi 6319273 ref NP_009356.1  pre-tRNA processing; Pta1p [Saccharomyces cerevisiae] sp Q01329 PTA1_YEAST PTA1 PROTEIN pir  S31299 pre-tRNA processing protein PTA1 - yeast (Saccharomyces cerevisiae) gb AAA34919.1  (M95673) pta1 [Saccharomyces cerevisiae] gb AAC04988.1  (U12980) Pta1p: Pre-tRNA processing involved protein [Saccharomyces cerevisiae]	9.9
567	5817732	gi 5817732 gb AAD52875.1 AF142703_1 (AF142703) maturase-like protein [Ophrestia radicata]	6.6
569	126296	gi 126296 sp P08548 LIN1_NYCCO LINE-1 REVERSE TRANSCRIPTASE HOMOLOG prf  1207289B reverse transcriptase related protein [Nycticebus coucang]	0.00000002
572	13816099	gi 13816099 gb AAK42875.1  (AE006870) Hypothetical protein [Sulfolobus solfataricus]	2.1
574	12513361	gi 12513361 gb AAG54834.1 AE005228_1 (AE005228) putative glutaminase [Escherichia coli O157:H7 EDL933] dbj BAB33961.1  (AP002552) putative glutaminase [Escherichia coli O157:H7]	3.3
575	11350453	gi 11350453 pir  B82965 hypothetical protein PA5456 [imported] - Pseudomonas aeruginosa (strain PAO1) gb AAG08841.1 AE004958_11 (AE004958) hypothetical protein [Pseudomonas aeruginosa]	9
584	1174945	gi 1174945 sp P43109 VEXB_SALTI VI POLYSACCHARIDE EXPORT INNER-MEMBRANE PROTEIN VEXB pir  G36892 Vi polysaccharide capsule transporter VexB - Salmonella typhi dbj BAA03197.1  (D14156) Wzm protein [Salmonella typhi]	4.5
586	4566616	gi 4566616 gb AAD23408.1 AF113531_1 (AF113531) follicle-stimulating hormone receptor precursor [Coturnix coturnix]	2
589	14746756	gi 14746756 ref XP_039102.1  similar to hypothetical protein FLJ20378 (H. sapiens) [Homo sapiens]	0.007

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
590	7429823	gi 7429823 pir D69991 conserved hypothetical protein yteU - <i>Bacillus subtilis</i> gb AAC00275.1  (AF008220) YteU [ <i>Bacillus subtilis</i> ] emb CAB14987.1  (Z99119) similar to hypothetical proteins from <i>B. subtilis</i> [ <i>Bacillus subtilis</i> ]	0.49
592	11877309	gi 11877309 emb CAC19023.1  (AJ278707) ORF 4 [ <i>Neisseria meningitidis</i> phage 2120]	9.2
594	14193715	gi 14193715 gb AAK56102.1 AF332074_1 (AF332074) peroxisome proliferator-activated receptor binding protein [ <i>Mus musculus</i> ]	0.000002
595	14625344	gi 14625344 gb AAK71419.1 U80842_9 (U80842) Hypothetical protein ZC239.19 [ <i>Caenorhabditis elegans</i> ]	1.9
596	1107614	gi 1107614 emb CAA62696.1  (X91351) viral infectivity factor protein [ <i>Human immunodeficiency virus type 1</i> ]	0.008
599	6324561	gi 6324561 ref NP_014630.1  required to degrade misfolded ER luminal and integral membrane proteins; Hrd1p [ <i>Saccharomyces cerevisiae</i> ] pir S66695 probable membrane protein YOL013c - yeast ( <i>Saccharomyces cerevisiae</i> ) emb CAA99012.1  (Z74755) ORF YOL013c [ <i>Saccharomyces cerevisiae</i> ]	6.7
600	7494878	gi 7494878 pir T33047 hypothetical protein B0344.2 - <i>Caenorhabditis elegans</i> gb AAC16982.1  (AF067209) B0344.2 gene product [ <i>Caenorhabditis elegans</i> ]	0.94
601	11347199	gi 11347199 pir C81351 probable UDP-N-acetylmuramoylalanyl-D-glutamyl-2, 6-diaminopimelate-D-alanyl-D-alanine ligase (EC 6.3.2.15) Cj0795c [imported] - <i>Campylobacter jejuni</i> (strain NCTC 11168) emb CAB73060.1  (AL139076) putative UDP-N-acetylmuramoylalanyl-D-glutamyl-2, 6-diaminopimelate-ligase [ <i>Campylobacter jejuni</i> ]	0.55
604	1293067	gi 1293067 gb AAB06014.1  (U50958) drosophila seven-in-absentia gene product homolog [ <i>Mus musculus</i> ]	7.9

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
606	5031975	gi 5031975 ref NP_005875.1  p21-activated kinase 4; protein kinase related to S. cerevisiae STE20, effector for Cdc42Hs [Homo sapiens] ref XP_041095.1  protein kinase related to S. cerevisiae STE20, effector for Cdc42Hs [Homo sapiens] ref XP_041093.1  protein kinase related to S. cerevisiae STE20, effector for Cdc42Hs [Homo sapiens] sp O96013 PAK4_HUMAN SERINE/THREONINE-PROTEIN KINASE PAK 4 (P21-ACTIVATED KINASE 4) (PAK-4) gb AAD01210.1  (AF005046) serine/threonine kinase [Homo sapiens] emb CAA09820.1  (AJ011855) PAK4 protein [Homo sapiens]	1.1
608	9280285	gi 9280285 dbj BAB01686.1  (AB046104) unnamed protein product [Macaca fascicularis]	8.7
609	5869819	gi 5869819 emb CAB55576.1  (AJ249395) NADH-ubiquinone oxidoreductase subunit 1 [Globodera pallida]	0.84
611	12045283	gi 12045283 ref NP_073094.1  conserved hypothetical protein [Mycoplasma genitalium] sp P47662 Y423_MYCGE HYPOTHETICAL PROTEIN MG423 pir G64246 conserved hypothetical protein MG423 - Mycoplasma genitalium gb AAC71647.1  (U39724) conserved hypothetical protein [Mycoplasma genitalium]	2.8
612	11289932	gi 11289932 pir T50247 probable helicase [imported] - fission yeast (Schizosaccharomyces pombe) emb CAB71840.1  (AL138666) putative helicase [Schizosaccharomyces pombe]	4.5
613	6119709	gi 6119709 emb CAB59566.1  (AJ249986) C3G protein [Rattus norvegicus]	1.6
620	7144507	gi 7144507 gb AAA58585.2  (U12823) hemolysin [Acanthamoeba polyphaga]	8.1
622	15011757	gi 15011757 gb AAB04582.3  (U64603) Hypothetical protein C09B7.1 [Caenorhabditis elegans]	7
625	8923324	gi 8923324 ref NP_060247.1  hypothetical protein FLJ20345 [Homo sapiens] ref XP_008161.3  hypothetical protein FLJ20345 [Homo sapiens] dbj BAA91105.1  (AK000352) unnamed protein product [Homo sapiens]	0.004

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
626	6960319	gi 6960319 gb AAD43326.2 AF155156_1 (AF155156) adaptor-related protein complex AP-4 epsilon subunit [Homo sapiens]	0.00008
628	5739387	gi 5739387 gb AAD50450.1 AF169388_1 (AF169388) alpha 4 collagen IV [Mus musculus]	5.5
631	3510234	gi 3510234 gb AAC33487.1  (AC005581) R31237_1, partial CDS [Homo sapiens]	8.6
632	802150	gi 802150 gb AAB32775.1  (S75037) pancreatic peptidylglycine alpha-amidating monooxygenase, PAM=membrane-bound isoform {alternatively spliced, clone PAM-3, transmembrane domain (Ba region)} [human, islet cell tumor cell line QGP-1, Peptide Partial, 971 aa] [Homo sapiens]	1E-13
636	2105238	gi 2105238 gb AAB57954.1  (U86905) similar to variola and vaccinia E9L [Molluscum contagiosum virus subtype 1]	1.5
641	7576305	gi 7576305 emb CAB88003.1  (AJ277410) NADH dehydrogenase subunit 1 [Taenia hydatigena]	9.3
643	12231395	gi 12231395 gb AAG49078.1 AF216121_1 (AF216121) phytochrome B [Gymnindia tonduzii]	7
647	281178	gi 281178 pir JQ1580 major surface antigen - hepatitis B virus (subtype adw4q-, strains CNTS-38 and Fou) emb CAA53344.1  (X75658) surface antigen [Hepatitis B virus]	6.7
652	7503145	gi 7503145 pir T16315 hypothetical protein F41C3.6 - Caenorhabditis elegans gb AAC46813.1  (U23521) asked finisher to look for frameshift because of discrepancy between prediction and EST CEESW76F; looks like there should be a splice from 21751 to 21706. But no problem was found in the area [Caenorhabditis elegans]	6.9
653	14773502	gi 14773502 ref XP_043252.1  PCAF associated factor 65 alpha [Homo sapiens] gb AAH08785.1 AAH08785 (BC008785) PCAF associated factor 65 alpha [Homo sapiens]	3E-10
658	14732840	gi 14732840 ref XP_034110.1  hypothetical protein XP_034110 [Homo sapiens]	1.8
659	13442965	gi 13442965 gb AAK26242.1 AF247132_1 (AF247132) putative chromatin remodeling factor [Mus musculus]	4

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
660	4512671	gi 4512671 gb AAD21725.1  (AC006931) En/Spm-like transposon protein [Arabidopsis thaliana] gb AAD33868.1 AF141375_1 (AF141375) protodermal factor 1 [Arabidopsis thaliana] gb AAD33869.1 AF141376_1 (AF141376) protodermal factor 1 [Arabidopsis thaliana]	6.6
663	13385330	gi 13385330 ref NP_080127.1  RIKEN cDNA 1700010I14 gene [Mus musculus] dbj BAB24262.1  (AK005830) putative [Mus musculus]	0.33
665	14325583	gi 14325583 dbj BAB60486.1  (AP000996) unknown product [Thermoplasma volcanium]	5.4
666	14779941	gi 14779941 ref XP_007847.3  hypothetical protein from clone 24796 [Homo sapiens]	0.00000002
670	14330407	gi 14330407 emb CAC41079.1  (AJ308518) P2X5 receptor [Gallus gallus]	3.3
672	13991595	gi 13991595 gb AAK51427.1  (AF355796) BRCA1 [Echymipera kalubu]	6.9
681	14728540	gi 14728540 ref XP_048261.1  similar to ring finger protein 23; RING-B box-coiled coil-B30.2 (M. musculus) [Homo sapiens]	0.026
683	14740222	gi 14740222 ref XP_049918.1  similar to hypothetical protein MGC10940 (H. sapiens) [Homo sapiens]	1E-86
684	11359451	gi 11359451 pir T51040 hypothetical protein B15I20.100 [imported] - Neurospora crassa emb CAB97464.1  (AL389900) conserved hypothetical protein [Neurospora crassa]	9.2
685	14735526	gi 14735526 ref XP_001804.4  guanylate binding protein 2, interferon-inducible [Homo sapiens]	2.3
687	7510353	gi 7510353 pir T27275 hypothetical protein Y63D3A.9 - Caenorhabditis elegans emb CAA21711.1  (AL032652) contains similarity to Pfam domain: PF00646 (F-box domain.), Score=43.2, E-value=1.9e-09, N=1 [Caenorhabditis elegans]	6.8
697	14773502	gi 14773502 ref XP_043252.1  PCAF associated factor 65 alpha [Homo sapiens] gb AAH08785.1 AAH08785 (BC008785) PCAF associated factor 65 alpha [Homo sapiens]	3E-10
700	7498998	gi 7498998 pir T16057 hypothetical protein F13D11.2 - Caenorhabditis elegans	0.27

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
703	4493893	gi 4493893 emb CAB39002.1  (AL034558) predicted using hexExon; MAL3P2.15 (PFC0230c), Hypothetical protein len: 3979 aa [Plasmodium falciparum]	9.2
706	7243081	gi 7243081 dbj BAA92588.1  (AB037771) KIAA1350 protein [Homo sapiens]	1E-79
707	7496384	gi 7496384 pir T33266 hypothetical protein C24B9.10 - Caenorhabditis elegans gb AAC19256.1  (AF068709) Hypothetical protein C24B9.10 [Caenorhabditis elegans]	5.4
708	7492007	gi 7492007 pir T41680 hypothetical protein SPCP1E11.01c - fission yeast (Schizosaccharomyces pombe) emb CAB54860.1  (AL117183) hypothetical protein [Schizosaccharomyces pombe]	4.1
709	14758507	gi 14758507 ref XP_044768.1  similar to death receptor 6 (H. sapiens) [Homo sapiens]	0.031
710	6513925	gi 6513925 gb AAF14829.1 AC011664_11 (AC011664) unknown protein [Arabidopsis thaliana]	0.83
713	6434714	gi 6434714 emb CAB61161.1  (AL132973) putative membrane protein. [Streptomyces coelicolor A3(2)]	1.2
714	8810476	gi 8810476 gb AAF80137.1 AC024174_19 (AC024174) Contains similarity to a hypothetical protein F24K9.13 gi 6006885 from Arabidopsis thaliana gb AC008153 and contains multiple PPR PF01535 repeats	0.22
719	9626839	gi 9626839 ref NP_041109.1  ORF 18 [ictalurid herpesvirus 1] sp Q00120 VG18_HSVI1 HYPOTHETICAL GENE 18 PROTEIN pir A36788 hypothetical protein ORF18 - ictalurid herpesvirus 1 (strain auburn 1) gb AAA88121.1  (M75136) ORF 18 [ictalurid herpesvirus 1]	9.2
723	15004903	gi 15004903 gb AAK77203.1 AC006622_3 (AC006622) Hypothetical protein C52D10.12 [Caenorhabditis elegans]	2.4
724	6677663	gi 6677663 ref NP_033047.1  retinoic acid induced 1 [Mus musculus] pir T30250 GT1 protein - mouse dbj BAA06184.1  (D29801) Unknown [Mus musculus] prf 2123391A GT1 gene [Mus musculus]	0.12

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
729	2343183	gi 2343183 gb AAB67715.1  (AF013243) zinc finger transcription factor [ <i>Lytechinus variegatus</i> ]	0.021
730	7465334	gi 7465334 pir B71980 proline dehydrogenase (EC 1.5.99.8) / 1-pyrroline-5-carboxylate dehydrogenase (EC 1.5.1.12) putA [similarity] - <i>Helicobacter pylori</i> (strain J99) gb AAD05632.1  (AE001444) Proline/pyrroline-5-carboxylate dehydrogenase [ <i>Helicobacter pylori</i> J99]	4.9
733	9631436	gi 9631436 ref NP_048287.1  ORF MSV216 SCG gene family protein [ <i>Melanoplus sanguinipes</i> entomopoxvirus] pir T28377 ORF MSV216 SCG gene family protein - <i>Melanoplus sanguinipes</i> entomopoxvirus gb AAC97749.1  (AF063866) ORF MSV216 SCG gene family protein [ <i>Melanoplus sanguinipes</i> entomopoxvirus]	0.52
734	13813168	gi 13813168 gb AAK40402.1  (AE006645) Hypothetical protein [ <i>Sulfolobus solfataricus</i> ]	2.7
736	14776978	gi 14776978 ref XP_033086.1  hypothetical protein XP_033086 [ <i>Homo sapiens</i> ]	5.4
737	7294863	gi 7294863 gb AAF50194.1  (AE003550) CG6718 gene product [ <i>Drosophila melanogaster</i> ]	1.9
745	7465334	gi 7465334 pir B71980 proline dehydrogenase (EC 1.5.99.8) / 1-pyrroline-5-carboxylate dehydrogenase (EC 1.5.1.12) putA [similarity] - <i>Helicobacter pylori</i> (strain J99) gb AAD05632.1  (AE001444) Proline/pyrroline-5-carboxylate dehydrogenase [ <i>Helicobacter pylori</i> J99]	3.9
750	5759216	gi 5759216 gb AAD51030.1 AF172399_1 (AF172399) p75 neurotrophin receptor a-1 [ <i>Xenopus laevis</i> ] gb AAD51031.1 AF172400_1 (AF172400) p75 neurotrophin receptor a-2 [ <i>Xenopus laevis</i> ]	3.9
751	6518511	gi 6518511 dbj BAA87907.1  (AB021222) ketosynthase [ <i>Streptomyces rochei</i> ]	6.6
754	6679777	gi 6679777 ref NP_032029.1  fibroblast growth factor 15 [ <i>Mus musculus</i> ] sp O35622 FGFF_MOUSE FIBROBLAST GROWTH FACTOR-15 PRECURSOR (FGF-15) gb AAB63197.1  (AF007268) fibroblast growth factor [ <i>Mus musculus</i> ] dbj BAB30961.1  (AK017829) putative [ <i>Mus musculus</i> ]	7.7

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
755	7498881	gi 7498881 pir T20748 hypothetical protein F11A5.2 - <i>Caenorhabditis elegans</i> emb CAB07355.1  (Z92830) contains similarity to Pfam domain: PF01604 (7TM chemoreceptor), Score=428.7, E-value=1.7e-125, N=1 [ <i>Caenorhabditis elegans</i> ]	6.4
756	1378135	gi 1378135 gb AAB02606.1  (U58466) putative fibroblast growth factor receptor 1-like protein; one of three possible open reading frames in the sequence [ <i>Rattus norvegicus</i> ]	5.1
758	7444901	gi 7444901 pir B71630 hypothetical protein RP702 - <i>Rickettsia prowazekii</i> emb CAA15138.1  (AJ235273) unknown [ <i>Rickettsia prowazekii</i> ]	2.2
759	12854427	gi 12854427 dbj BAB30025.1  (AK015906) putative [ <i>Mus musculus</i> ]	6.6
763	4185892	gi 4185892 emb CAA21831.1  (AL033125) 1-evidence=predicted by content~1-method=genefinder;084~1-evidence_end~2-evidence=predicted by match~2-match_accession=SWISS-PROT:P38205~2-match_description=HYPOTHETICAL 77.9 KD PROTEIN IN RRN10-MCM2 INTERGENIC REGION.~2-match_species=SACCHA>	9.1
766	14725855	gi 14725855 ref XP_038865.1  similar to hypothetical protein PRO2822 ( <i>H. sapiens</i> ) [ <i>Homo sapiens</i> ]	9.2
770	7582302	gi 7582302 gb AAF64271.1 AF208857_1 (AF208857) BM-015 [ <i>Homo sapiens</i> ]	8E-13
772	6594283	gi 6594283 dbj BAA88419.1  (AB016615) hydrophobic transmembrane protein [ <i>Staphylococcus aureus</i> ]	1.7
783	12597803	gi 12597803 gb AAG60115.1 AC073178_26 (AC073178) hypothetical protein [ <i>Arabidopsis thaliana</i> ]	0.62
784	8777303	gi 8777303 dbj BAA96893.1  (AB018112) serine carboxypeptidase [ <i>Arabidopsis thaliana</i> ]	1.2
785	10045258	gi 10045258 emb CAC07930.1  (AJ228487) cytochrome c oxidase subunit 3 [ <i>Acanthogammarus godlewskii</i> ]	1.5
786	1794167	gi 1794167 dbj BAA11217.1  (D78137) unnamed protein product [ <i>Vibrio parahaemolyticus</i> ]	9.7
790	12835698	gi 12835698 dbj BAB23329.1  (AK004489) putative [ <i>Mus musculus</i> ]	8.1



Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
791	131761	gi 131761 sp P11636 QAY_NEUCR QUINATE PERMEASE (QUINATE TRANSPORTER) pir G31277 quinate transport protein - Neurospora crassa (tentative sequence) emb CAA32752.1  (X14603) quate transporter [Neurospora crassa]	1.7
794	11640576	gi 11640576 gb AAG39285.1 AF113214_1 (AF113214) MSTP034 [Homo sapiens]	6.3
797	5306243	gi 5306243 gb AAD41976.1 AC006438_8 (AC006438) hypothetical protein [Arabidopsis thaliana]	3.4
798	7511787	gi 7511787 pir T29089 alpha-mannosidase (EC 3.2.1.-), class II - fall armyworm gb AAB62719.1  (AF005034) alpha-mannosidase II [Spodoptera frugiperda]	7
800	3170793	gi 3170793 gb AAC18201.1  (AF062165) immunoglobulin heavy chain variable region [Homo sapiens]	8.7
802	11466458	gi 11466458 ref NP_038161.1  NADH dehydrogenase subunit 4L [Chrysodidymus synuroideus] gb AAB95105.1  (U54633) NADH dehydrogenase subunit 4L [Chrysodidymus synuroideus] gb AAF36927.1 AF222718_1 (AF222718) NADH dehydrogenase subunit 4L [Chrysodidymus synuroideus]	4.2
803	14779941	gi 14779941 ref XP_007847.3  hypothetical protein from clone 24796 [Homo sapiens]	0.00000002
804	13430868	gi 13430868 ref NP_077008.1  hypothetical protein MGC2615 [Homo sapiens] ref XP_015759.1  hypothetical protein MGC2615 [Homo sapiens] gb AAH01656.1 AAH01656 (BC001656) Unknown (protein for MGC:2615) [Homo sapiens]	4E-21
808	3293234	gi 3293234 gb AAC25913.1  (U96413) T-DNA oncoprotein [Agrobacterium tumefaciens]	7.9
810	7299169	gi 7299169 gb AAF54367.1  (AE003682) Fps85D gene product [alt 1] [Drosophila melanogaster]	5.6
814	11361627	gi 11361627 pir H82736 hypothetical protein XF0992 [imported] - Xylella fastidiosa (strain 9a5c) gb AAF83802.1 AE003937_6 (AE003937) hypothetical protein [Xylella fastidiosa 9a5c]	0.43
816	10803160	gi 10803160 emb CAC13088.1  (AL445503) putative two component system response regulator [Streptomyces coelicolor]	6.4

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
819	2613090	gi 2613090 gb AAB84279.1  (AF030317) OmpR [Proteus vulgaris]	1.7
821	2494232	gi 2494232 sp Q62814 E2F5_RAT TRANSCRIPTION FACTOR E2F5 (E2F-5) gb AAB00180.1  (U31668) E2F-5 [Rattus norvegicus]	7.8
822	14729752	gi 14729752 ref XP_036388.1  hypothetical protein MGC5297 [Homo sapiens]	6.7
825	7024427	gi 7024427 emb CAA87594.2  (Z47547) Pwi=orf234.1;Mpo=orf244;Angio=orfx~no ATG start codon [Chondrus crispus]	8
833	11691811	gi 11691811 emb CAC11114.1  (AL121893) bA189K21.6 (Sec23 (S. cerevisiae) homolog B) [Homo sapiens]	5.6
834	117704	gi 117704 sp P18246 CXA1_BOVIN GAP JUNCTION ALPHA-1 PROTEIN (CONNEXIN 43) (CX43) (VASCULAR SMOOTH MUSCLE CONNEXIN 43) pir A36623 gap junction protein Cx43 - bovine gb AAA30459.1  (J05535) vascular smooth muscle connexin43 [Bos taurus]	9.2
835	1170606	gi 1170606 sp P43188 KADC_MAIZE ADENYLATE KINASE, CHLOROPLAST (ATP-AMP TRANSPHOSPHORYLASE) pir  S45634 adenylate kinase (EC 2.7.4.3), chloroplast - maize pdb 1ZAK A Chain A, Adenylate Kinase From Maize In Complex With The Inhibitor P1,P5-Bis(Adenosine-5'-)pentaphosphate (Ap5a) pdb 1ZAK B Chain B, Adenylate Kinase From Maize In Complex With The Inhibitor P1,P5-Bis(Adenosine-5'-)pentaphosphate (Ap5a)	0.0000001
836	7661750	gi 7661750 ref NP_054866.1  HSPC047 protein [Homo sapiens] gb AAF29019.1 AF161532_1 (AF161532) HSPC047 [Homo sapiens]	5E-28
838	13815530	gi 13815530 gb AAK42398.1  (AE006828) Transport protein, hypothetical [Sulfolobus solfataricus]	5
839	14771844	gi 14771844 ref XP_045585.1  hypothetical protein FLJ11085 [Homo sapiens] emb CAB91047.2  (AL109935) dJ1022P6.2 (KIAA1434) [Homo sapiens]	0.089
843	4007786	gi 4007786 emb CAA51374.1  (X72850) acetyl CoA acetyltransferase [Sphingomonas sp.]	4.6

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
847	9968471	gi 9968471 emb CAC06698.1  (AJ275988) Kruppel like factor [Mus musculus]	6.2
848	7499805	gi 7499805 pir T21337 hypothetical protein F25D7.1 - Caenorhabditis elegans emb CAB01696.1  (Z78418) cDNA EST yk60g6.3 comes from this gene~cDNA EST yk60g6.5 comes from this gene~cDNA EST yk156b10.3 comes from this gene~cDNA EST yk156b10.5 comes from this gene~cDNA EST yk399f2.3 comes from this gene~cDNA EST yk399f2.5 comes from this gene~cDN>	7.1
849	6581093	gi 6581093 gb AAF18453.1 AF205599_1 (AF205599) transposase-like protein [Mus musculus]	4.4
853	13651256	gi 13651256 ref XP_015436.1  chloride channel 4 [Homo sapiens] ref XP_045758.1  chloride channel 4 [Homo sapiens] ref XP_045756.1  chloride channel 4 [Homo sapiens] ref XP_045757.1  chloride channel 4 [Homo sapiens] dbj BAA77327.1  (AB019432) chloride channel protein 4 [Homo sapiens] gb AAD50981.1 AF170492_1 (AF170492) chloride channel CLC4 [Homo sapiens]	2.3
854	336159	gi 336159 gb AAA46774.1  (M90520) polymerase protein [Woodchuck hepatitis B virus]	3.2
861	8979124	gi 8979124 dbj BAA98959.1  (AP002547) CT651 hypothetical protein [Chlamydophila pneumoniae J138]	0.76
863	4758712	gi 4758712 ref NP_004659.1  alpha-glucosidase; brush border hydrolase [Homo sapiens] sp O43451 MGA_HUMAN MALTASE-GLUCOAMYLASE, INTESTINAL [INCLUDES: MALTASE (ALPHA-GLUCOSIDASE); GLUCOAMYLASE (GLUCAN 1,4-ALPHA-GLUCOSIDASE)] gb AAC39568.1  (AF016833) maltase-glucoamylase [Homo sapiens]	0.1
864	13812050	gi 13812050 ref NP_113184.1  hypothetical protein [Guillardia theta] gb AAK39752.1 AF083031_109 (AF083031) hypothetical protein [Guillardia theta]	4.3
867	10726408	gi 10726408 gb AAF54394.2  (AE003683) CG9381 gene product [Drosophila melanogaster]	5.5

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
870	7299899	gi 7299899 gb AAF55074.1  (AE003705) CG7987 gene product [alt 1] [Drosophila melanogaster] gb AAF55075.1  (AE003705) CG7987 gene product [alt 2] [Drosophila melanogaster]	9.7
872	6979325	gi 6979325 gb AAF34418.1 AF172282_7 (AF172282) putative phosphatidylinositol 4-kinase [Oryza sativa]	4.8
873	13699930	gi 13699930 dbj BAB41229.1  (AP003129) conserved hypothetical protein [Staphylococcus aureus subsp. aureus N315] dbj BAB56175.1  (AP003358) conserved hypothetical protein [Staphylococcus aureus subsp. aureus Mu50]	3.7
877	6841256	gi 6841256 gb AAF28981.1 AF161421_1 (AF161421) HSPC303 [Homo sapiens]	7E-64
879	2459878	gi 2459878 gb AAC40459.1  (AF005734) glycoprotein precursor [Marburg virus]	2.5
880	14759292	gi 14759292 ref XP_006700.2  checkpoint with forkhead and ring finger domains [Homo sapiens] gb AAF91084.1 AF170724_1 (AF170724) cell cycle checkpoint protein CHFR [Homo sapiens]	0.000000002
886	141164	gi 141164 sp P19297 YORM_TTV1 HYPOTHETICAL 38.6 KD PROTEIN emb CAA32993.1  (X14855) URF (352 AA) [Thermoproteus tenax virus 1]	2.2
889	1755061	gi 1755061 gb AAB50394.1  (U62737) photosystem I subunit XI [Synechococcus sp. PCC 7942]	3.6
890	7464739	gi 7464739 pir G71920 hypothetical protein jhp0518 - Helicobacter pylori (strain J99) gb AAD06099.1  (AE001485) putative [Helicobacter pylori J99]	7.6
891	14141161	gi 14141161 ref NP_004492.2  heterogeneous nuclear ribonucleoprotein U, isoform b; hnRNP U protein; scaffold attachment factor A; p120 nuclear protein [Homo sapiens] gb AAH03367.1 AAH03367 (BC003367) heterogeneous nuclear ribonucleoprotein U (scaffold attachment factor A) [Homo sapiens] gb AAH03621.1 AAH03621 (BC003621) heterogeneous nuclear ribonucleoprotein U (scaffold attachment factor A) [Homo sapiens]	6.9
892	7649887	gi 7649887 dbj BAA94165.1  (AP000422) tail fiber protein [Escherichia coli O157:H7]	0.63

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
901	7496871	gi 7496871 pir T19650 hypothetical protein C32H11.7 - <i>Caenorhabditis elegans</i> emb CAB05141.1  (Z82260) cDNA EST yk576f6.3 comes from this gene [ <i>Caenorhabditis elegans</i> ]	4.6
905	13400109	gi 13400109 gb AAK21974.1  (U77931) rRNA promoter binding protein [ <i>Rattus norvegicus</i> ]	0.003
918	13235458	gi 13235458 emb CAC33751.1  (AJ293322) ProP2 protein [ <i>Rickettsia typhi</i> ]	4.1
919	7292165	gi 7292165 gb AAF47577.1  (AE003472) CG12023 gene product [ <i>Drosophila melanogaster</i> ]	0.25
920	12831207	gi 12831207 ref NP_075579.1  gamma-aminobutyric acid (GABA-A) receptor, subunit epsilon [ <i>Rattus norvegicus</i> ] gb AAF70383.1 AF189262_1 (AF189262) GABA-A receptor epsilon-like subunit [ <i>Rattus norvegicus</i> ]	4.5
926	10765285	gi 10765285 gb AAG22971.1 AF183431_1 (AF183431) inhibitor of apoptosis protein 2 [ <i>Rattus norvegicus</i> ]	4.2
927	2832268	gi 2832268 gb AAC15477.1  (AF043233) Caco-2 oligopeptide transporter [ <i>Homo sapiens</i> ]	5.1
928	6179898	gi 6179898 gb AAF05702.1 AF190129_1 (AF190129) Na <sup>+</sup> /K <sup>+</sup> /2Cl <sup>-</sup> cotransporter [ <i>Callinectes sapidus</i> ]	6.1
931	12644035	gi 12644035 sp Q9Z8M1 IF2_CHLPN TRANSLATION INITIATION FACTOR IF-2 pir E81576 translation initiation factor 2 CP0440 [imported] - <i>Chlamydomonas reinhardtii</i> (strain AR39) gb AAF38279.1  (AE002205) translation initiation factor 2 [ <i>Chlamydomonas reinhardtii</i> AR39] dbj BAA98527.1  (AP002546) initiation factor-2 [ <i>Chlamydomonas reinhardtii</i> J138]	0.91
932	10956362	gi 10956362 ref NP_052811.1  pXO1-115 [ <i>Bacillus anthracis</i> ] pir C59105 hypothetical protein pXO1-115 - <i>Bacillus anthracis</i> virulence plasmid pXO1 gb AAD32419.1 AAD32419 (AF065404) pXO1-115 [ <i>Bacillus anthracis</i> ] gb AAD41347.1 AF150965_1 (AF150965) resolvase X [ <i>Bacillus anthracis</i> ]	1.9
933	13814214	gi 13814214 gb AAK41294.1  (AE006722) Conserved hypothetical protein [ <i>Sulfolobus solfataricus</i> ]	0.99

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
940	6320195	gi 6320195 ref NP_010275.1  Ydl009cp [Saccharomyces cerevisiae] pir S52510 probable membrane protein YDL009c - yeast (Saccharomyces cerevisiae) emb CAA88350.1  (Z48432) unknown [Saccharomyces cerevisiae] emb CAA98568.1  (Z74059) ORF YDL009c [Saccharomyces cerevisiae]	7
942	10181130	gi 10181130 ref NP_065586.1  acid sphingomyelinase-like phosphodiesterase 3a [Mus musculus] emb CAA69329.1  (Y08135) acid sphingomyelinase-like phosphodiesterase [Mus musculus]	6E-84
943	13124718	gi 13124718 sp P54358 DPOD_DROME DNA POLYMERASE DELTA CATALYTIC SUBUNIT gb AAF49555.1  (AE003529) DNAPol-delta gene product [Drosophila melanogaster]	2.8
946	2258300	gi 2258300 gb AAB63269.1  (AF001783) AgrC [Staphylococcus aureus]	1.9
947	7460037	gi 7460037 pir T13431 hypothetical protein T17A13.20 Arabidopsis thaliana emb CAB79678.1  (AL161574) hypothetical protein [Arabidopsis thaliana]	3.4
948	7494291	gi 7494291 pir E71616 hypothetical protein PFB0365w malaria parasite (Plasmodium falciparum) gb AAC71862.1  (AE001390) hypothetical protein [Plasmodium falciparum]	1.9
950	1707627	gi 1707627 emb CAA96381.1  (Z71701) cytochrome oxidase subunit III [Euhadra herklotsi]	9.1
952	6739602	gi 6739602 gb AAF27330.1  (AF178534) talin [Homo sapiens]	1E-14

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
954	7498956	gi 7498956 pir T20804 hypothetical protein F12F6.1 - <i>Caenorhabditis elegans</i> emb CAA97791.1  (Z73425) cDNA EST yk30a8.3 comes from this gene~cDNA EST yk12d11.5 comes from this gene~cDNA EST yk30a8.5 comes from this gene~cDNA EST yk117g9.3 comes from this gene~cDNA EST yk113h11.5 comes from this gene~cDNA EST yk117g9.5 comes from this gene~cDNA> emb CAA97796.1  (Z73426) cDNA EST yk30a8.3 comes from this gene~cDNA EST yk12d11.5 comes from this gene~cDNA EST yk30a8.5 comes from this gene~cDNA EST yk117g9.3 comes from this gene~cDNA EST yk113h11.5 comes from this gene~cDNA EST yk117g9.5 comes from this gene~cDNA>	6.6
955	9631417	gi 9631417 ref NP_048325.1  ORF MSV254 leucine rich repeat gene family protein, similar to Amsacta moorei entomopoxvirus Q3 ORF SW:P28854 [Melanoplus sanguinipes entomopoxvirus] pir T28415 ORF MSV254 leucine rich repeat gene family protein - Melanoplus sanguinipes entomopoxvirus gb AAC97730.1  (AF063866) ORF MSV254 leucine rich repeat gene family protein, similar to Amsacta moorei entomopoxvirus Q3 ORF SW:P28854 [Melanoplus sanguinipes entomopoxvirus]	2.1
956	7160126	gi 7160126 emb CAB76312.1  (AL158060) putative membrane protein. [Streptomyces coelicolor A3(2)]	0.25
959	1203965	gi 1203965 gb AAA89173.1  (L42379) bone-derived growth factor [Homo sapiens]	1.4
960	585147	gi 585147 sp P38094 FLUG_EMENI FLUG PROTEIN pir A53186 fluG protein - <i>Emericella nidulans</i> gb AAC37414.1  (L27817) FluG [ <i>Emericella nidulans</i> ]	5.4
963	11352695	gi 11352695 pir D83270 transcription-repair coupling protein Mfd PA3002 [imported] - <i>Pseudomonas aeruginosa</i> (strain PAO1) gb AAG06390.1 AE004725_3 (AE004725) transcription-repair coupling protein Mfd [ <i>Pseudomonas aeruginosa</i> ]	1.3

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
964	119777	gi 119777 sp P16291 FA9_SHEEP COAGULATION FACTOR IX (CHRISTMAS FACTOR) pir  I47078 coagulation factor IXa (EC 3.4.21.22) - sheep (fragment) gb AAA31520.1  (M26233) factor IX [Ovis aries]	8.2
965	7473507	gi 7473507 pir  F75587 probable glycosyltransferase - Deinococcus radiodurans (strain R1) gb AAF12451.1 AE001863_76 (AE001863) glycosyltransferase, putative [Deinococcus radiodurans]	0.24
967	2494130	gi 2494130 gb AAB80639.1  (AC002376) Contains similarity to Glycine SRC2 (gb AB000130). [Arabidopsis thaliana]	5.2
972	10728660	gi 10728660 gb AAF52603.2  (AE003620) CG8683 gene product [Drosophila melanogaster]	6E-12
980	7500037	gi 7500037 pir  T34063 chromosome segregation protein smc1 F28B3.7 [similarity] - Caenorhabditis elegans gb AAK21378.1  (AF003136) contains similarity to ATP synthase subunit B [Caenorhabditis elegans]	0.68
981	7298917	gi 7298917 gb AAF54122.1  (AE003675) CG10272 gene product [Drosophila melanogaster]	5.9
983	1170115	gi 1170115 sp P46430 GTT1_MANSE GLUTATHIONE S-TRANSFERASE 1 (GST CLASS-THETA) gb AAA92880.1  (L32091) glutathione S-transferase [Manduca sexta]	7.1
985	10864490	gi 10864490 gb AAG24203.1  (AF022981) Hypothetical protein W03F9.6 [Caenorhabditis elegans]	5.3
987	105400	gi 105400 pir  A35648 B-cell adhesion protein CD22 alpha splice form precursor - human emb CAA36988.1  (X52785) CD22 antigen [Homo sapiens] prf  1608208A B cell antigen DC22 [Homo sapiens]	6
989	14750376	gi 14750376 ref XP_012394.3  myosin IXA [Homo sapiens]	3.9
990	6324560	gi 6324560 ref NP_014629.1  Y013w-ap [Saccharomyces cerevisiae] pir  S78736 protein YOL013w-a - yeast (Saccharomyces cerevisiae) delta remnant	9.3
991	7290503	gi 7290503 gb AAF45956.1  (AE003431) CG3527 gene product [Drosophila melanogaster]	7.6



Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
994	9964623	gi 9964623 ref NP_064753.1  RP DNA pol [Roseophage SIO1] gb AAG02598.1 AF189021_17 (AF189021) Roseophage SIO1 complete genome	3.5
996	2769538	gi 2769538 emb CAA11217.1  (AJ223279) voltage-sensitive sodium channel [Plutella xylostella]	7.6
998	9628506	gi 9628506 ref NP_043384.1  regulatory protein E2 [Human papillomavirus type 29] sp P50772 VE2_HPV29 REGULATORY PROTEIN E2 gb AAA79432.1  (U31784) regulatory protein E2 [Human papillomavirus type 29]	6.2
999	6566147	gi 6566147 dbj BAA04745.2  (D21203) large Forked protein [Drosophila melanogaster]	0.085
1002	11346920	gi 11346920 pir H81390 probable integral membrane protein Cj0461c [imported] - Campylobacter jejuni (strain NCTC 11168) emb CAB75099.1  (AL139075) putative integral membrane protein [Campylobacter jejuni]	1.5
1005	9294038	gi 9294038 dbj BAB01995.1  (AB020746) gene_id:MOB24.1~unknown protein [Arabidopsis thaliana]	9.8
1006	4505067	gi 4505067 ref NP_002349.1  MAD2-like 1; mitotic arrest deficient, yeast, homolog-like 1 [Homo sapiens] sp Q13257 MD21_HUMAN MITOTIC SPINDLE ASSEMBLY CHECKPOINT PROTEIN MAD2A (MAD2-LIKE 1) (HSMAD2) pir G01942 mitotic feedback control protein Madp2 homolog - human gb AAC52060.1  (U31278) mitotic feedback control protein Madp2 homolog [Homo sapiens] gb AAC50781.1  (U65410) Mad2 [Homo sapiens] emb CAA03943.1  (AJ000186) MAD2 [Homo sapiens] gb AAH00356.1 AAH00356 (BC000356) MAD2 (mitotic arrest deficient, yeast, homolog)-like 1 [Homo sapiens] gb AAH05945.1 AAH05945 (BC005945) MAD2 (mitotic arrest deficient, yeast, homolog)-like 1 [Homo sapiens] gb AAK38174.1  (AF202273) MAD2-like protein 1 [Homo sapiens]	0.000005

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
1010	13994140	gi 13994140 ref NP_038928.1  antigen p97 (melanoma associated) identified by monoclonal antibodies 133.2 and 96.5 [Mus musculus] dbj BAA86655.1  (AB024336) membrane-bound transferrin-like protein p97 [Mus musculus] dbj BAB41139.1  (AB047799) membrane-bound transferrin-like protein [Mus musculus]	4.1
1011	11465559	gi 11465559 ref NP_045049.1  unknown [Cyanidium caldarium] gb AAF12997.1 AF022186_169 (AF022186) unknown [Cyanidium caldarium]	1.8
1012	13421288	gi 13421288 gb AAK22158.1  (AE005691) TonB-dependent receptor [Caulobacter crescentus]	0.65
1013	6978481	gi 6978481 ref NP_036905.1  a-kinase anchoring protein [Rattus norvegicus] sp Q62924 AK11_RAT A KINASE ANCHOR PROTEIN 11 (PROTEIN KINASE A ANCHORING PROTEIN 11) (PKA11) (A KINASE ANCHOR PROTEIN 220 KDA) (AKAP 220) pir T42732 A-kinase anchoring protein AKAP 220 - rat gb AAB06559.1  (U48288) AKAP 220 [Rattus norvegicus]	3
1015	7498137	gi 7498137 pir T31694 hypothetical protein D1065.2 - Caenorhabditis elegans	7.4
1017	9944230	gi 9944230 emb CAC05416.1  (AJ400866) membrane tyrosine phosphatase [Bos indicus]	7
1023	14520862	gi 14520862 ref NP_126337.1  hypothetical protein [Pyrococcus abyssi] pir G75106 hypothetical protein PAB0444 - Pyrococcus abyssi (strain Orsay) emb CAB49568.1  (AJ248285) hypothetical protein [Pyrococcus abyssi]	9.7
1025	11290247	gi 11290247 pir D82039 conserved hypothetical protein VC2740 [imported] - Vibrio cholerae (group O1 strain N16961) gb AAF95879.1  (AE004339) conserved hypothetical protein [Vibrio cholerae]	8.2
1027	12484269	gi 12484269 gb AAG54048.1 AF224607_4 (AF224607) NADH dehydrogenase subunit 4 [Propithecus verreauxi deckeni]	7
1028	14329703	gi 14329703 emb CAC40662.1  (AJ292926) anaerobic (class III) ribonucleotide reductase large subunit chain [Staphylococcus aureus]	1.7

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
1037	2636683	gi 2636683 gb AAC06264.1  (U66333) pol [Schistosoma mansoni]	5.2
1039	6016240	gi 6016240 sp O02100 HOP1_CAEEL INTEGRAL MEMBRANE PROTEIN HOP-1 pir T15184 presenilin-beta homolog - Caenorhabditis elegans pir T42237 presenilin-beta homolog - Caenorhabditis elegans gb AAB52948.1  (AF000265) Hypothetical protein C18E3.8 [Caenorhabditis elegans] gb AAB84394.1  (AF021905) presenilin [Caenorhabditis elegans]	8.5
1040	10047173	gi 10047173 dbj BAB13380.1  (AB046774) KIAA1554 protein [Homo sapiens]	8.4
1043	14089928	gi 14089928 emb CAC13687.1  (AL445564) HEMOLYSIN C [Mycoplasma pulmonis]	4.8
1045	7469269	gi 7469269 pir S77245 bioY protein - Synechocystis sp. (strain PCC 6803) dbj BAA17579.1  (D90907) BioY protein [Synechocystis sp. PCC 6803]	5.6
1046	10140780	gi 10140780 gb AAG13610.1 AC078840_1 (AC078840) hypothetical protein [Oryza sativa]	2.2
1050	7496756	gi 7496756 pir T19593 hypothetical protein C31A11.3 - Caenorhabditis elegans emb CAB05685.1  (Z83218) contains similarity to Pfam domain: PF01838 (Domain of unknown function), Score=506.2, E-value=5.4e-154, N=2 [Caenorhabditis elegans]	4.1
1052	7500420	gi 7500420 pir T32834 hypothetical protein F33H12.1 - Caenorhabditis elegans gb AAB95002.1  (AF040649) Hypothetical protein F33H12.1 [Caenorhabditis elegans]	4
1054	14736828	gi 14736828 ref XP_032481.1  hypothetical protein XP_032481 [Homo sapiens]	5.5
1056	7290674	gi 7290674 gb AAF46122.1  (AE003436) CG4320 gene product [Drosophila melanogaster]	4.7
1060	14970757	gi 14970757 emb CAC44464.1  (AJ313506) CtxX protein [Salmonella typhimurium]	5.5
1062	4115497	gi 4115497 dbj BAA36391.1  (AB010426) AL1 like protein [Phytoplasma sp.]	3.4
1064	111816	gi 111816 pir S21348 probable pol polyprotein-related protein 4 - rat emb CAA37647.1  (X53581) ORF4 [Rattus norvegicus]	6.4

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
1067	14149940	gi 14149940 ref NP_115610.1  hypothetical protein FLJ23059 [Homo sapiens] dbj BAB15536.1  (AK026712) unnamed protein product [Homo sapiens]	8E-34
1072	6321761	gi 6321761 ref NP_011837.1  Yhl026cp [Saccharomyces cerevisiae] sp P38740 YHC6_YEAST HYPOTHETICAL 30.7 KD PROTEIN IN RIM1-SNF6 INTERGENIC REGION PRECURSOR pir  S48942 hypothetical protein YHL026c - yeast (Saccharomyces cerevisiae) gb AAB65062.1  (U11583) YHL026c gene product [Saccharomyces cerevisiae]	0.26
1076	5932366	gi 5932366 gb AAD56919.1 AF180145_11 (AF180145) hypothetical protein; zml2orf5 [Zymomonas mobilis]	7.2
1084	7106864	gi 7106864 gb AAF36157.1 AF151071_1 (AF151071) HSPC237 [Homo sapiens]	8.3
1087	1173846	gi 1173846 gb AAA86616.1  (U39455) envelope glycoprotein precursor [Crimean-Congo hemorrhagic fever virus]	6.1
1092	87765	gi 87765 pir  JU0033 hypothetical L1 protein (third intron of gene TS) - human prf  1510254A L1 repetitive element ORF [Homo sapiens]	2
1096	9506813	gi 9506813 ref NP_062184.1  Inositol polyphosphate-5-phosphatase [Rattus norvegicus] gb AAB40610.1  (U55192) inositol polyphosphate 5' phosphatase Ship [Rattus norvegicus]	3.3
1101	11496734	gi 11496734 ref NP_045511.1  B. burgdorferi predicted coding region BBH18 [Borrelia burgdorferi] pir  C70237 hypothetical protein BBH18 - Lyme disease spirochete plasmid H/lp28-3 gb AAC66022.1  (AE000784) B. burgdorferi predicted coding region BBH18 [Borrelia burgdorferi]	7
1102	9630723	gi 9630723 ref NP_047269.1  putative virulence determinant Vir [Mycoplasma arthritidis bacteriophage MAV1] gb AAC33779.1  (AF074945) putative virulence determinant Vir [Mycoplasma arthritidis bacteriophage MAV1]	9.9

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
1107	3638957	gi 3638957 gb AAC36301.1  (AC004877) sco-spondin-mucin-like; similar to P98167 (PID:g1711548); details of intron/exon structure uncertain [Homo sapiens]	3.3
1110	14725582	gi 14725582 ref XP_002477.3  hypothetical protein FLJ10829 [Homo sapiens]	0.85
1112	7298126	gi 7298126 gb AAF53364.1  (AE003642) BG:DS00180.10 gene product [Drosophila melanogaster]	8.6
1120	15011489	gi 15011489 gb AAK77584.1 AF396436_24 (AF396436) heme maturase [Tetrahymena thermophila]	0.077
1121	7500306	gi 7500306 pir T21638 hypothetical protein F32B4.1 - Caenorhabditis elegans emb CAB04238.1  (Z81522) predicted using Genefinder [Caenorhabditis elegans]	5.6
1123	170156	gi 170156 gb AAA73078.1  (M73688) [Sorghum bicolor endosperm tissue mRNA, complete CDS.], gene product prf 1808331A gamma kafirin [Sorghum bicolor]	0.41
1125	348951	gi 348951 gb AAC78248.1  (M77194) gag [Rat leukemia virus]	4.2
1127	14583262	gi 14583262 ref NP_127506.1  replicase ORF1ab polyprotein [Equine arteritis virus] emb CAA69187.2  (Y07862) replicase ORF1b polyprotein [Cloning vector pEAV030] emb CAC42775.2  (X53459) replicase ORF1b polyprotein [Equine arteritis virus]	0.79
1128	6322140	gi 6322140 ref NP_012215.1  involved in filamentous growth; Dfg10p [Saccharomyces cerevisiae] sp P40526 YIE9_YEAST HYPOTHETICAL 30.3 KD PROTEIN IN RPL34B-SYG1 INTERGENIC REGION pir S48430 probable membrane protein YIL049w - yeast (Saccharomyces cerevisiae) emb CAA86173.1  (Z38060) orf, len: 253, CAI: 0.11 [Saccharomyces cerevisiae]	7.6
1129	14779404	gi 14779404 ref XP_008099.4  integrin alpha L precursor [Homo sapiens]	0.004

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
1136	13928898	gi 13928898 ref NP_113837.1  killer cell lectin-like receptor subfamily G, member 1 [Rattus norvegicus] pir I59421 mast cell function associated antigen - rat emb CAA56208.1  (X79812) mast cell function associated antigen [Rattus norvegicus] emb CAA65829.1  (X97191) MAFA protein [Rattus norvegicus]	5
1138	11467057	gi 11467057 ref NP_042533.1  NADH dehydrogenase, subunit 4 [Acanthamoeba castellanii] sp Q37375 NU4M_ACACA NADH-UBIQUINONE OXIDOREDUCTASE CHAIN 4 pir S53834 NADH dehydrogenase (ubiquinone) (EC 1.6.5.3) chain 4 - Acanthamoeba castellanii mitochondrion gb AAD11826.1  (U12386) NADH dehydrogenase, subunit 4 [Acanthamoeba castellanii]	0.63
1140	7331848	gi 7331848 gb AAF60536.1  (AC024772) contains similarity to Pfam family PF00569 (Zinc finger present in dystrophin, CBP/p300), score=30.4, E=4.3e-05, N=1 [Caenorhabditis elegans]	4.5
1144	12725042	gi 12725042 gb AAK06095.1 AE006429_13 (AE006429) UNKNOWN PROTEIN [Lactococcus lactis subsp. lactis]	0.82
1146	13122173	gi 13122173 emb CAC32349.1  (AL583945) putative bifunctional protein (histidine kinase and regulator) [Streptomyces coelicolor]	1.3
1147	13925661	gi 13925661 gb AAK49407.1 AF261233_1 (AF261233) sodium/calcium exchanger protein [Mus musculus]	5.3
1149	6552484	gi 6552484 gb AAF16411.1 AF038572_1 (AF038572) jagged2 [Mus musculus]	0.83
1154	13489284	gi 13489284 gb AAF16898.2 AF168614_1 (AF168614) HMG-box transcription factor Sox17 [Danio rerio]	9.8
1155	1170115	gi 1170115 sp P46430 GTT1_MANSE GLUTATHIONE S-TRANSFERASE 1 (GST CLASS-THETA) gb AAA92880.1  (L32091) glutathione S-transferase [Manduca sexta]	7.8
1159	13377412	gi 13377412 gb AAK20674.1 AF316639_9 (AF316639) Wzy [Streptococcus pneumoniae] gb AAK74527.1  (AE007347) hypothetical protein [Streptococcus pneumoniae]	4.1

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
1163	7298868	gi 7298868 gb AAF54075.1  (AE003673) CG1105 gene product [ <i>Drosophila melanogaster</i> ]	5.5
1164	10178202	gi 10178202 dbj BAB11626.1  (AB016875) gene_id:K9D7.13~unknown protein [ <i>Arabidopsis thaliana</i> ]	9.3
1166	7494379	gi 7494379 pir C71610 probable membrane associated protein PFB0615c - malaria parasite ( <i>Plasmodium falciparum</i> ) gb AAC71912.1  (AE001406) predicted membrane associated protein [ <i>Plasmodium falciparum</i> ]	6.5
1170	12408633	gi 12408633 ref NP_074924.1  cytochrome c oxidase subunit 1 [ <i>Podospora anserina</i> ] sp P20681 COX1_PODAN CYTOCHROME C OXIDASE POLYPEPTIDE I pir A48327 cytochrome-c oxidase (EC 1.9.3.1) chain I - <i>Podospora anserina</i> mitochondrion emb CAA38777.1  (X55026) cytochrome oxidase c [ <i>Podospora anserina</i> ]	3.1
1173	2144233	gi 2144233 pir JC5010 nucleotide-binding protein F - <i>Methanosarcina mazei</i> emb CAA62802.1  (X91502) ABC transporter [ <i>Methanosarcina mazei</i> ]	6.9
1174	10581460	gi 10581460 gb AAG20195.1  (AE005096) Vng2034h [ <i>Halobacterium</i> sp. NRC-1]	0.15
1176	13652647	gi 13652647 ref XP_007000.3  solute carrier family 6 (neurotransmitter transporter, betaine/GABA), member 12 [ <i>Homo sapiens</i> ] ref XP_029976.1  solute carrier family 6 (neurotransmitter transporter, betaine/GABA), member 12 [ <i>Homo sapiens</i> ]	9
1181	9631326	gi 9631326 ref NP_048159.1  ORF MSV088 hypothetical protein [ <i>Melanoplus sanguinipes</i> entomopoxvirus] pir T28249 ORF MSV088 hypothetical protein - <i>Melanoplus sanguinipes</i> entomopoxvirus gb AAC97639.1  (AF063866) ORF MSV088 hypothetical protein [ <i>Melanoplus sanguinipes</i> entomopoxvirus]	3.2
1184	13897920	gi 13897920 gb AAK48502.1 AF260966_1 (AF260966) IL-8 receptor [ <i>Oncorhynchus mykiss</i> ]	2.6
1185	12860694	gi 12860694 dbj BAB32022.1  (AK020187) putative [ <i>Mus musculus</i> ]	0.86
1187	6671484	gi 6671484 gb AAC49301.2  (U32444) phytochrome F [ <i>Lycopersicon esculentum</i> ]	3.4

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
1191	11358531	gi 11358531 pir T51640 myb-related transcription factor MYB19 [imported] - Arabidopsis thaliana (fragment) gb AAC83590.1  (AF062868) putative transcription factor [Arabidopsis thaliana]	0.95
1192	88462	gi 88462 pir A27307 proline-rich phosphoprotein (gene PRH1, Db allele) - human	7.9
1193	7484909	gi 7484909 pir T06608 disease resistance protein homolog F16J13.80 - Arabidopsis thaliana emb CAB40942.1  (AL049638) putative disease resistance protein (TMV N-like) [Arabidopsis thaliana] emb CAB78244.1  (AL161533) putative disease resistance protein (TMV N-like) [Arabidopsis thaliana]	3.4
1195	7492269	gi 7492269 pir T39663 paired amphipathic helix, probable transcription regulator protein - fission yeast (Schizosaccharomyces pombe) emb CAA21310.1  (AL031856) putative transcriptional regulatory protein [Schizosaccharomyces pombe]	4.1
1197	134437	gi 134437 sp P13823 SERA_PLAFG SERINE-REPEAT ANTIGEN PROTEIN PRECURSOR (P126) (111 KDA ANTIGEN) pir A54505 serine-repeat antigen precursor - malaria parasite (Plasmodium falciparum) (strain FCR3) gb AAA29763.1  (J03993) serine repeat protein [Plasmodium falciparum] gb AAA16791.1  (J04000) serine-repeat antigen protein [Plasmodium falciparum] gb AAA74911.1  (U08113) serine repeat antigen [Plasmodium falciparum]	4.6
1202	12841678	gi 12841678 dbj BAB25308.1  (AK007856) putative [Mus musculus]	2E-31
1211	586120	gi 586120 sp Q07283 TRHY_HUMAN TRICHOHYALIN pir A45973 trichohyalin - human gb AAA65582.1  (L09190) trichohyalin [Homo sapiens]	9.8
1214	3122611	gi 3122611 sp O18417 A70A_DROSE ACCESSORY GLAND-SPECIFIC PEPTIDE 70A PRECURSOR (PARAGONIAL PEPTIDE B) emb CAA67791.1  (X99414) sex-peptide [Drosophila sechellia]	6.1
1215	2190464	gi 2190464 emb CAB09537.1  (Z96107) Uncx4.1 [Mus musculus]	7.6



Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
1216	153930	gi 153930 gb AAA27047.1  (M23007) NADPH-sulfite reductase hemoprotein component [Salmonella typhimurium]	1.3
1217	5091519	gi 5091519 dbj BAA78754.1  (AB023482) Hypothetical protein [Oryza sativa]	0.95
1219	9759203	gi 9759203 dbj BAB09740.1  (AB015476) heat shock transcription factor HSF30-like protein [Arabidopsis thaliana]	9.2
1224	1732073	gi 1732073 gb AAC50901.1  (U75308) TBP-associated factor [Homo sapiens]	0.13
1225	7505421	gi 7505421 pir T23399 hypothetical protein K07C10.1 - Caenorhabditis elegans emb CAA87375.1  (Z47074) similarity to transmembranous domains of the drosophila protein patched (Swiss Prot accession number P18502) [Caenorhabditis elegans]	3.4
1228	140791	gi 140791 sp P17369 YHR3_VACCV HYPOTHETICAL HOST RANGE 27.4 KDA PROTEIN pir WZVZA3 27.4K HindIII-C protein - vaccinia virus (strain WR) gb AAA69594.1  (M22812) unknown protein [Vaccinia virus]	4.6
1231	6831569	gi 6831569 sp O84098 IF2_CHLTR TRANSLATION INITIATION FACTOR IF-2 pir H71558 probable translation initiation factor IF-2 - Chlamydia trachomatis (serotype D, strain UW3/Cx) gb AAC67687.1  (AE001283) Initiation Factor-2 [Chlamydia trachomatis]	7.8
1243	12725042	gi 12725042 gb AAK06095.1 AE006429_13 (AE006429) UNKNOWN PROTEIN [Lactococcus lactis subsp. lactis]	0.91
1246	10178036	gi 10178036 dbj BAB11519.1  (AB005245) pectinesterase [Arabidopsis thaliana]	0.28
1249	7494298	gi 7494298 pir A71613 hypothetical protein PFB0530c - malaria parasite (Plasmodium falciparum) gb AAC71895.1  (AE001400) hypothetical protein [Plasmodium falciparum]	2.6
1253	14721018	gi 14721018 ref XP_051562.1  similar to agrin (H. sapiens) [Homo sapiens]	3.5
1255	6175163	gi 6175163 gb AAF04889.1 AC011437_4 (AC011437) unknown protein [Arabidopsis thaliana]	8.7

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
1264	12320927	gi 12320927 gb AAG50592.1 AC083891_6 (AC083891) ABC transporter, putative [Arabidopsis thaliana]	9.5
1265	13375919	gi 13375919 ref NP_078940.1  hypothetical protein FLJ11838 [Homo sapiens] dbj BAB13931.1  (AK021900) unnamed protein product [Homo sapiens]	4.2
1274	9369395	gi 9369395 gb AAF87143.1 AC002423_8 (AC002423) T23E23.16 [Arabidopsis thaliana]	7.2
1275	7435789	gi 7435789 pir T06276 benzothiadiazole-induced protein (clone WCI-4) - wheat gb AAC49287.1  (U32430) thiol protease [Triticum aestivum]	5.4
1280	7497192	gi 7497192 pir T19833 hypothetical protein C38D9.3 - Caenorhabditis elegans emb CAB03949.1  (Z81481) C38D9.3 [Caenorhabditis elegans]	0.15
1284	14739967	gi 14739967 ref XP_035107.1  v-raf murine sarcoma viral oncogene homolog B1 [Homo sapiens]	1.9
1289	7463772	gi 7463772 pir F70103 signal peptidase I (lepB-1) homolog - Lyme disease spirochete gb AAC66422.1  (AE001117) signal peptidase I (lepB-1) [Borrelia burgdorferi]	0.22
1292	4580388	gi 4580388 gb AAD24366.1 AC007171_2 (AC007171) hypothetical protein [Arabidopsis thaliana]	5.5
1293	10437002	gi 10437002 dbj BAB14954.1  (AK024666) unnamed protein product [Homo sapiens]	0.000000002
1296	4493974	gi 4493974 emb CAB39033.1  (AL034559) hypothetical protein, PFC0930c [Plasmodium falciparum]	3.2
1301	482030	gi 482030 pir S40544 hypothetical protein - Escherichia coli dbj BAA01299.1  (D10483) IS1 hypothetical protein E-96(PIR:A04462) [Escherichia coli]	8.3
1306	4836719	gi 4836719 gb AAD30537.1 AF133256_2 (AF133256) envelope protein precursor [Friend mink cell focus-forming virus]	8.6
1307	12843929	gi 12843929 dbj BAB26168.1  (AK009250) putative [Mus musculus]	2.1
1308	10175999	gi 10175999 dbj BAB07095.1  (AP001518) lipopolysaccharide biosynthesis [Bacillus halodurans]	2.8

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
1310	14767733	gi 14767733 ref XP_030859.1  similar to TGF(beta)-induced transcription factor 2 (H. sapiens) [Homo sapiens]	1.5
1311	1351721	gi 1351721 sp Q10105 YAQ5_SCHPO PUTATIVE TRANSLATIONAL ACTIVATOR C18G6.05C (GCN1 HOMOLOG) pir T37919 GCN1 homolog - fission yeast (Schizosaccharomyces pombe) emb CAA92385.1  (Z68198) GCN1 homologue [Schizosaccharomyces pombe]	0.48
1312	13376747	gi 13376747 ref NP_079428.1  hypothetical protein FLJ12660 [Homo sapiens] ref XP_017923.1  hypothetical protein FLJ12660 [Homo sapiens] dbj BAB14203.1  (AK022722) unnamed protein product [Homo sapiens]	0.000000003
1315	9453886	gi 9453886 dbj BAB03287.1  (AB045975) pro-alpha 1 type V/XI collagen [Pagrus major]	0.021
1320	11034630	gi 11034630 dbj BAB17154.1  (AP002868) hypothetical protein [Oryza sativa] dbj BAB55491.1  (AP002541) hypothetical protein [Oryza sativa]	0.49
1322	14727261	gi 14727261 ref XP_027313.1  hypothetical protein FLJ22351 [Homo sapiens] ref XP_027314.1  hypothetical protein FLJ22351 [Homo sapiens]	0.077
1327	2789430	gi 2789430 dbj BAA24380.1  (D30612) repressor protein [Homo sapiens]	0.97
1328	7497494	gi 7497494 pir T19963 hypothetical protein C46C2.4 - Caenorhabditis elegans emb CAA92590.1  (Z68296) contains similarity to Pfam domain: PF00561 (alpha/beta hydrolase fold), Score=30.8, E-value=1e-05, N=1 [Caenorhabditis elegans]	0.2
1329	13129018	gi 13129018 ref NP_076956.1  hypothetical protein MGC3077 [Homo sapiens] ref XP_030116.1  hypothetical protein MGC3077 [Homo sapiens] gb AAC23790.1  (AC005154) similar to protein U28928 (PID:g861306) [Homo sapiens] gb AAH00625.1 AAH00625 (BC000625) Unknown (protein for MGC:3077) [Homo sapiens]	2E-89
1330	14647539	gi 14647539 gb AAK71916.1 AF332040_1 (AF332040) growth hormone receptor [Jaculus jaculus]	4.8

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
1331	1584488	gi 1584488 prf 2123261AB chemosensory receptor [Caenorhabditis elegans]	0.68
1333	2326324	gi 2326324 emb CAB10936.1  (Z98264) cytochrome c oxidase subunit III [Anabaena sp.]	4.1
1334	7434912	gi 7434912 pir H71934 phosphatidylglycerophosphate synthase - Helicobacter pylori (strain J99) gb AAD05990.1  (AE001475) PHOSPHATIDYLGLYCEROPHOSPHATE SYNTHASE [Helicobacter pylori J99]	5.9
1337	1335199	gi 1335199 emb CAA26919.1  (X03145) pot. ORF V [Homo sapiens]	5.2
1340	7440285	gi 7440285 pir T07994 ribosomal protein S9 - Chlamydomonas reinhardtii chloroplast emb CAA74006.1  (Y13655) 30S ribosomal protein S9 [Chlamydomonas reinhardtii]	3
1341	8923088	gi 8923088 ref NP_060127.1  hypothetical protein FLJ20080 [Homo sapiens] ref XP_046636.1  hypothetical protein FLJ20080 [Homo sapiens] dbj BAA90936.1  (AK000087) unnamed protein product [Homo sapiens]	0.000000008
1345	6958206	gi 6958206 gb AAF32493.1 AF093132_1 (AF093132) kexin-like protease KEX1 [Pneumocystis carinii f. sp. muris]	2.3
1346	7496774	gi 7496774 pir T32166 hypothetical protein C31B8.8 - Caenorhabditis elegans	2
1350	9366789	gi 9366789 emb CAB95551.1  (AL359782) hypothetical protein, CHR1.313. [Trypanosoma brucei]	2.4
1352	10175488	gi 10175488 dbj BAB06586.1  (AP001516) cation antiporter (Na <sup>+</sup> /Ca <sup>2+</sup> ) [Bacillus halodurans]	0.72
1354	1119230	gi 1119230 dbj BAA06595.1  (D31786) secretion protein Y [Acyrtosiphon kondoi endosymbiont]	8.5
1355	2897812	gi 2897812 dbj BAA24894.1  (AB010996) G2-G1 polypeptide precursor [tomato spotted wilt virus]	8.9
1357	13111586	gi 13111586 gb AAK12388.1 AF296094_1 (AF296094) polypeptide [Porcine teschovirus]	9.2
1359	13881823	gi 13881823 gb AAK46426.1  (AE007064) hypothetical protein [Mycobacterium tuberculosis CDC1551]	1.3
1368	1362185	gi 1362185 pir S56686 histone H2B123 - wheat dbj BAA07158.1  (D37944) protein H2B123 [Triticum aestivum]	9.7

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
1369	13812308	gi 13812308 ref NP_113426.1  hypothetical protein [Guillardia theta] emb CAC26995.1  (AJ010592) hypothetical protein [Guillardia theta]	4.7
1370	13541057	gi 13541057 ref NP_110745.1  Permease (major facilitator superfamily) [Thermoplasma volcanium] dbj BAB59369.1  (AP000991) unknown product [Thermoplasma volcanium]	7.6
1371	9964353	gi 9964353 ref NP_064821.1  AMV039 [Amsacta moorei entomopoxvirus] gb AAG02745.1 AF250284_39 (AF250284) AMV039 [Amsacta moorei entomopoxvirus]	5.3
1373	902377	gi 902377 gb AAA82981.1  (U18059) polyprotein [pestivirus type 1]	0.41
1374	8953748	gi 8953748 dbj BAA98067.1  (AP000368) gene_id:F6B6.1~pir C71410~similar to unknown protein [Arabidopsis thaliana]	0.27
1375	11291752	gi 11291752 pir T47971 seven in absentia-like protein - Arabidopsis thaliana emb CAB71109.1  (AL132959) seven in absentia-like protein [Arabidopsis thaliana]	10
1379	10177211	gi 10177211 dbj BAB10286.1  (AB026650) protein kinase [Arabidopsis thaliana]	5
1384	7332073	gi 7332073 gb AAF60760.1  (AC024810) Hypothetical protein Y54E10A.1 [Caenorhabditis elegans]	5.7
1388	11358814	gi 11358814 pir T46130 RNA polymerase III subunit-like protein - Arabidopsis thaliana emb CAB62010.1  (AL132967) RNA polymerase III subunit-like protein [Arabidopsis thaliana]	2.2
1389	4506569	gi 4506569 ref NP_002932.1  roundabout (axon guidance receptor, Drosophila) homolog 1 [Homo sapiens] gb AAC39575.1  (AF040990) roundabout 1 [Homo sapiens]	4E-17
1393	11761072	gi 11761072 dbj BAB19062.1  (AP002744) hypothetical protein [Oryza sativa]	1.9
1398	461649	gi 461649 sp Q05004 BB61_RABIT BRUSH BORDER 61.9 KD PROTEIN PRECURSOR pir B45665 adult-specific 61.9K brush border protein precursor - rabbit emb CAA78302.1  (Z12840) protein of unknown function [Oryctolagus cuniculus]	8E-52

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
1402	478809	gi 478809 pir  S29851 protein kinase 6 (EC 2.7.1.-) - soybean gb AAA34002.1  (M67449) protein kinase [Glycine max] prf 1908223A protein kinase [Glycine max]	9.3
1406	1517936	gi 1517936 gb AAB07000.1  (U52347) tachykinin-like receptor [Stomoxys calcitrans]	1.1
1407	9977929	gi 9977929 sp Q05013 LIPA_NEIMB CAPSULE POLYSACCHARIDE MODIFICATION PROTEIN LIPA pir  D81240 capsule polysaccharide modification protein LipA NMB0082 [imported] - Neisseria meningitidis (group B strain MD58) gb AAF40546.1  (AE002367) capsule polysaccharide modification protein LipA [Neisseria meningitidis MC58]	9.3
1412	14773348	gi 14773348 ref XP_038450.1  20849 [Homo sapiens]	1E-48
1413	13537363	gi 13537363 dbj BAB40663.1  (AB051851) death receptor 3 [Homo sapiens]	3.9
1419	7477083	gi 7477083 pir  A70577 hypothetical protein Rv2133c - Mycobacterium tuberculosis (strain H37RV) emb CAB08660.1  (Z95388) hypothetical protein Rv2133c [Mycobacterium tuberculosis] gb AAK46475.1  (AE007067) conserved hypothetical protein [Mycobacterium tuberculosis CDC1551]	1.9
1422	7499021	gi 7499021 pir  T20846 hypothetical protein F13E9.9 - Caenorhabditis elegans emb CAA93411.1  (Z69383) F13E9.9 [Caenorhabditis elegans]	4.1
1424	14723696	gi 14723696 ref XP_035744.1  hypothetical protein XP_035744 [Homo sapiens]	1.5
1425	9961349	gi 9961349 ref NP_005500.2  Dmx-like 1 [Homo sapiens]	0.94
1426	478302	gi 478302 pir  JN0835 carbonate dehydratase (EC 4.2.1.1) I - chimpanzee	1.6
1427	6649942	gi 6649942 gb AAF21641.1 AF032379_1 (AF032379) gonadotrophin releasing hormone receptor; GnRH-R [Trichosurus vulpecula]	9.6
1432	6636500	gi 6636500 gb AAF20201.1 AF205791_1 (AF205791) squalene synthase [Botryococcus braunii]	1.8
1434	7504070	gi 7504070 pir  T22586 hypothetical protein F53F4.14 - Caenorhabditis elegans	0.05

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
1437	102177	gi 102177 pir S13141 hypothetical protein (ribosomal RNA repeat region) - Giardia lamblia	1.2
1439	13357869	gi 13357869 ref NP_078143.1  unique hypothetical [Ureaplasma urealyticum] pir D82907 hypothetical protein UU309 [imported] - Ureaplasma urealyticum gb AAF30718.1 AE002128_6 (AE002128) unique hypothetical [Ureaplasma urealyticum]	5.4
1451	7468435	gi 7468435 pir B72015 metalloproteinase, insulinase family CP0903 [imported] - Chlamydomonas reinhardtii (strains CWL029 and AR39) gb AAD19093.1  (AE001675) Insulinase family/Protease III [Chlamydomonas reinhardtii CWL029] gb AAF38689.1  (AE002249) metalloprotease, insulinase family [Chlamydomonas reinhardtii AR39] dbj BAA99165.1  (AP002548) insulinase family/protease III [Chlamydomonas reinhardtii J138]	7.1
1452	9857712	gi 9857712 gb AAG00902.1 AF176776_1 (AF176776) xyloglucan endotransglycosylase LeXET2 [Lycopersicon esculentum]	1.9
1453	4493974	gi 4493974 emb CAB39033.1  (AL034559) hypothetical protein, PFC0930c [Plasmodium falciparum]	3.4
1454	4493900	gi 4493900 emb CAB39009.1  (AL034558) predicted using hexExon; MAL3P2.22 (PFC0265c), Hypothetical protein, len: 637 aa [Plasmodium falciparum]	6.1
1456	7503603	gi 7503603 pir T16375 hypothetical protein F46G11.1 - Caenorhabditis elegans gb AAA81397.1  (U40412) Hypothetical protein F46G11.1 [Caenorhabditis elegans]	2.1
1462	9437954	gi 9437954 gb AAF87502.1 AF250474_1 (AF250474) nucleoprotein [Influenza A virus (A/Duck/Hong Kong/P54/97(H11N9))]	6.7
1464	2129239	gi 2129239 pir G64488 reverse gyrase (intein-containing) - Methanococcus jannaschii gb AAB99531.1  (U67592) reverse gyrase, intein containing (rgy) [Methanococcus jannaschii]	9.2
1466	12232439	gi 12232439 ref NP_073602.1  hypothetical protein FLJ11937 [Homo sapiens] dbj BAB15124.1  (AK025392) unnamed protein product [Homo sapiens]	6.4

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
1468	7243247	gi 7243247 dbj BAA92671.1  (AB037854) KIAA1433 protein [Homo sapiens]	2E-87
1472	12382242	gi 12382242 gb AAG53080.1 AF263824_1 (AF263824) 5'A2rel-related protein [Leishmania donovani]	8.7
1473	13812383	gi 13812383 ref NP_113501.1  seryl-tRNA synthetase (serin-tRNA ligase) [Guillardia theta] emb CAC27070.1  (AJ010592) seryl-tRNA synthetase (serin-tRNA ligase) [Guillardia theta]	6.5
1476	6014998	gi 6014998 sp O80164 DPA5_BPR69 DNA POLYMERASE PROCESSIVITY COMPONENT (DNA POLYMERASE ACCESSORY PROTEIN 45) (GP45) pdb 1B77 A Chain A, Building A Replisome Structure From Interacting Pieces: A Sliding Clamp Complexed With An Interaction Peptide From Dna Polymerase pdb 1B77 B Chain B, Building A Replisome Structure From Interacting Pieces: A Sliding Clamp Complexed With An Interaction Peptide From Dna Polymerase pdb 1B77 C Chain C, Building A Replisome Structure From Interacting Pieces: A Sliding Clamp Complexed With An Interaction Peptide From Dna Polymerase pdb 1B8H A Chain A, Sliding Clamp, Dna Polymerase pdb 1B8H B Chain B, Sliding Clamp, Dna Polymerase pdb 1B8H C Chain C, Sliding Clamp, Dna Polymerase gb AAC39310.1  (AF039565) DNA polymerase processivity component [Bacteriophage RB69]	6.9
1479	7706747	gi 7706747 ref NP_057263.1  transient receptor potential 4 [Homo sapiens] sp Q9UBN4 TRP4_HUMAN SHORT TRANSIENT RECEPTOR POTENTIAL CHANNEL 4 (TRPC4) (TRP-RELATED PROTEIN 4) (HTRP-4) (HTRP4) gb AAD51736.1 AF175406_1 (AF175406) transient receptor potential 4 [Homo sapiens] gb AAF22927.1 AF063822_1 (AF063822) trp-related protein 4 [Homo sapiens]	1.7
1480	9757550	gi 9757550 dbj BAB08163.1  (AB030831) SrtT [Streptococcus pyogenes]	0.47
1483	13516917	gi 13516917 dbj BAB40338.1  (AB044076) hybrid sensor [Myxococcus xanthus]	5



Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
1487	5790208	gi 5790208 dbj BAA83536.1  (AB031285) NADH dehydrogenase subunit 2 [ <i>Taenia saginata</i> ]	2.7
1489	14754352	gi 14754352 ref XP_032294.1  hypothetical protein FLJ10775 [ <i>Homo sapiens</i> ]	0.0008
1490	3552028	gi 3552028 gb AAC64946.1  (AF087130) siderophore regulation protein [ <i>Neurospora crassa</i> ]	7.2
1493	3913936	gi 3913936 sp Q43652 IP27_SOLTU PROTEINASE INHIBITOR TYPE II CM7 PRECURSOR pir  S43105 proteinase inhibitor II - potato emb CAA55082.1  (X78275) proteinase inhibitor II [ <i>Solanum tuberosum</i> ]	9.9
1494	6573777	gi 6573777 gb AAF17697.1 AC009243_24 (AC009243) F28K19.17 [ <i>Arabidopsis thaliana</i> ]	2.2
1496	13622425	gi 13622425 gb AAK34148.1  (AE006569) maltodextrin transport system permease [ <i>Streptococcus pyogenes</i> M1 GAS]	3.7
1498	9910266	gi 9910266 ref NP_064627.1  kinesin-like protein 2 [ <i>Homo sapiens</i> ] dbj BAB03309.1  (AB035898) kinesin-like protein 2 [ <i>Homo sapiens</i> ]	5E-19
1503	7294128	gi 7294128 gb AAF49482.1  (AE003527) CG4925 gene product [ <i>Drosophila melanogaster</i> ]	3.6
1506	14089610	gi 14089610 emb CAC13370.1  (AL445563) unknown; predicted coding region [ <i>Mycoplasma pulmonis</i> ]	1.5
1507	2565196	gi 2565196 gb AAB81938.1  (AF000381) non-functional folate binding protein [ <i>Homo sapiens</i> ]	0.0000004
1509	14753935	gi 14753935 ref XP_040892.1  hypothetical protein XP_040892 [ <i>Homo sapiens</i> ]	3.3
1510	12545425	gi 12545425 ref NP_074975.1  hypothetical protein [ <i>Astasia longa</i> ] sp P34776 YCY2_ASTLO HYPOTHETICAL 34.5 KDA PROTEIN IN RPS12-TRNP INTERGENIC REGION (ORF288) emb CAC24586.1  (AJ294725) hypothetical protein [ <i>Astasia longa</i> ]	7
1511	420215	gi 420215 pir  B45878 hypothetical protein 2 - mouse	7.1
1512	7512874	gi 7512874 pir  T08792 hypothetical protein DKFZp586E1422.1 - human (fragment) emb CAB43306.1  (AL050170) hypothetical protein [ <i>Homo sapiens</i> ]	5.5
1514	221758	gi 221758 dbj BAA01683.1  (D10879) UL37 [human herpesvirus 1]	0.18

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
1517	11466232	gi 11466232 ref NP_062855.1  ORF9, contains 8 trans membrane regions, putative [Physarum polycephalum] dbj BAB08089.1  (AB027295) ORF9, contains 8 trans membrane regions, putative [Physarum polycephalum]	0.43
1518	182710	gi 182710 gb AAA52467.1  (M13918) fibronectin receptor alpha-subunit precursor [Homo sapiens]	1.3
1519	1142976	gi 1142976 gb AAC52392.1  (U28769) odorant receptor [Mus musculus] prf 2207403C odorant receptor [Mus musculus]	5.6
1520	6912446	gi 6912446 ref NP_036417.1  potassium voltage-gated channel, subfamily H (eag-related), member 4; ether-a-go-go K(+) channel family member [Homo sapiens] dbj BAA83592.1  (AB022698) BEC2 [Homo sapiens]	8.4
1522	14601483	gi 14601483 ref NP_148021.1  hypothetical protein [Aeropyrum pernix] pir G72637 hypothetical protein APE1558 - Aeropyrum pernix (strain K1) dbj BAA80557.1  (AP000061) 279aa long hypothetical protein [Aeropyrum pernix]	5.7
1526	12515306	gi 12515306 gb AAG56369.1 AE005365_3 (AE005365) orf, hypothetical protein [Escherichia coli O157:H7 EDL933] dbj BAB35435.1  (AP002557) hypothetical protein [Escherichia coli O157:H7]	7.4
1530	2765672	gi 2765672 emb CAB06819.1  (Z86115) ArbX [Lactobacillus delbrueckii]	7.9
1532	13472514	gi 13472514 ref NP_104081.1  unknown protein [Mesorhizobium loti] dbj BAB49867.1  (AP003000) unknown protein [Mesorhizobium loti]	7.9
1533	3309522	gi 3309522 gb AAC26098.1  (U18292) unknown [Borrelia burgdorferi]	2.1
1535	14520328	gi 14520328 ref NP_125803.1  activator 1, replication factor C, small subunit [Pyrococcus abyssi] pir C75198 activator 1, replication factor c, small chain PAB0068 - Pyrococcus abyssi (strain Orsay) emb CAB49034.1  (AJ248283) activator 1, replication factor C, small subunit [Pyrococcus abyssi]	0.41
1536	7229605	gi 7229605 gb AAF42902.1  (AF229961) NADH dehydrogenase subunit 1 [Taygetis andromede]	6.7

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
1537	6681261	gi 6681261 ref NP_031926.1  ect2 oncogene [Mus musculus] sp Q07139 ECT2_MOUSE ECT2 PROTEIN (ECT2 ONCOGENE) pir S32372 transforming protein (ect2) - mouse gb AAA37536.1  (L11316) ect2 [Mus musculus] prf 1911407A oncogene ect2 [Mus musculus]	6E-10
1538	12381848	gi 12381848 emb CAC24715.1  (AJ297319) glucose-6-phosphate dehydrogenase-6-phosphogluconolactonase [Plasmodium berghei]	7
1540	7688657	gi 7688657 gb AAF67469.1 AF146760_1 (AF146760) septin 2-like cell division control protein [Homo sapiens]	9.7
1541	13021853	gi 13021853 gb AAK11564.1 AF318500_1 (AF318500) ent-kaurenoic acid hydroxylase [Arabidopsis thaliana]	0.091
1543	6900006	gi 6900006 emb CAB71294.1  (AJ251917) chorion protein s18 [Ceratitis capitata]	2.1
1545	1076445	gi 1076445 pir S53004 mitosis-specific cyclin CYC2 - rape gb AAA51660.1  (L25406) cyclin [Brassica napus]	4.3
1548	7293274	gi 7293274 gb AAF48655.1  (AE003503) CG9644 gene product [Drosophila melanogaster]	0.46
1549	11358961	gi 11358961 pir T51243 Sc11 protein [imported] - rice (fragment) gb AAC98091.1  (AF067401) Sc11 protein [Oryza sativa]	3.9
1550	8978966	gi 8978966 dbj BAA98801.1  (AP002547) phenylalanyl tRNA synthetase beta [Chlamydomonas pneumoniae J138]	4.1
1551	14010341	gi 14010341 gb AAK51958.1 AF362013_1 (AF362013) ATP synthase F0 subunit 6 [Halichondria sp. RFW-2001]	8.2
1553	8923094	gi 8923094 ref NP_060130.1  hypothetical protein FLJ20085 [Homo sapiens] ref XP_009383.2  hypothetical protein FLJ20085 [Homo sapiens] dbj BAA90939.1  (AK000092) unnamed protein product [Homo sapiens]	1.6
1557	14724725	gi 14724725 ref XP_037600.1  hypothetical protein XP_037600 [Homo sapiens]	4.2

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
1561	14758684	gi 14758684 ref XP_007211.4  retinoblastoma 1 (including osteosarcoma) [Homo sapiens] ref XP_033825.1  retinoblastoma 1 (including osteosarcoma) [Homo sapiens] ref XP_033826.1  retinoblastoma 1 (including osteosarcoma) [Homo sapiens] ref XP_033827.1  retinoblastoma 1 (including osteosarcoma) [Homo sapiens]	0.91
1565	9635387	gi 9635387 ref NP_059285.1  ORF137 [Xestia c-nigrum granulovirus] gb AAF05251.1 AF162221_137 (AF162221) ORF137 [Xestia c-nigrum granulovirus]	5.9
1572	1730077	gi 1730077 sp P18160 KYK1_DICDI NON-RECEPTOR TYROSINE KINASE SPORE LYSIS A (TYROSINE-PROTEIN KINASE 1) pir T18276 non-receptor tyrosine kinase - slime mold (Dictyostelium discoideum) gb AAB41125.1  (U32174) non-receptor tyrosine kinase [Dictyostelium discoideum]	6
1574	9622133	gi 9622133 gb AAF89633.1 AF167719_1 (AF167719) transmembrane leptin receptor [Sus.scrofa]	2.6
1578	139809	gi 139809 sp P27571 XIST_MOUSE X INACTIVE SPECIFIC TRANSCRIPT PROTEIN pir S15433 hypothetical protein - mouse emb CAA41978.1  (X59289) ORF [Mus musculus] prf 1711440A xist gene [Mus musculus]	7.7
1579	8567792	gi 8567792 gb AAF76364.1  (AC013428) I-box binding factor, putative [Arabidopsis thaliana]	5.7
1581	7638161	gi 7638161 gb AAF65408.1 AF238312_1 (AF238312) putative serine-threonine protein kinase MkcB [Dictyostelium discoideum]	9.2
1583	12644495	gi 12644495 sp Q9Z7G7 EX5B_CHLPN EXODEOXYRIBONUCLEASE V BETA CHAIN dbj BAA98945.1  (AP002547) exodeoxyribonuclease V, beta [Chlamydomonas reinhardtii J138]	7.2
1588	11350667	gi 11350667 pir D83160 nitrite extrusion protein 1 PA3877 [imported] - Pseudomonas aeruginosa (strain PAO1) emb CAA75538.1  (Y15252) nitrate extrusion protein [Pseudomonas aeruginosa] gb AAG07264.1 AE004805_2 (AE004805) nitrite extrusion protein 1 [Pseudomonas aeruginosa]	9.7

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
1589	12644495	gi 12644495 sp Q9Z7G7 EX5B_CHLPN EXODEOXYRIBONUCLEASE V BETA CHAIN dbj BAA98945.1  (AP002547) exodeoxyribonuclease V, beta [Chlamydomonas reinhardtii J138]	5.2
1590	305479	gi 305479 gb AAC37807.1  (L11473) envelope glycoprotein [Human immunodeficiency virus type 1]	4.3
1591	9055244	gi 9055244 ref NP_061256.1  huntington yeast partner C [Mus musculus] gb AAD39464.1 AF135440_1 (AF135440) huntington yeast partner C [Mus musculus]	0.8
1593	12666210	gi 12666210 emb CAC28083.1  (AL138875) bA103J18.2 (novel protein) [Homo sapiens]	4
1596	12855510	gi 12855510 dbj BAB30362.1  (AK016654) putative [Mus musculus]	0.067
1597	133747	gi 133747 sp P09899 RS12_MICLU 30S RIBOSOMAL PROTEIN S12 pir A26956 ribosomal protein S12 - Micrococcus luteus gb AAA25317.1  (M17788) ribosomal protein S12 (gtg start codon) [Micrococcus luteus]	9.9
1600	7292455	gi 7292455 gb AAF47859.1  (AE003480) CG15005 gene product [Drosophila melanogaster]	0.43
1601	14748674	gi 14748674 ref XP_038133.1  Prader-Willi/Angelman syndrome-5 [Homo sapiens]	8.9
1602	11278020	gi 11278020 pir H82215 serine transporter VC1301 [imported] - Vibrio cholerae (group O1 strain N16961) gb AAF94460.1  (AE004210) serine transporter [Vibrio cholerae]	7.8
1607	9757538	gi 9757538 dbj BAB08122.1  (AB030852) maturase [Lilium rubellum]	6.6
1618	12249143	gi 12249143 ref NP_066194.2  NADH dehydrogenase subunit 5 [Schistosoma japonicum] gb AAG13134.2  (AF215860) NADH dehydrogenase subunit 5 [Schistosoma japonicum]	5.9
1620	7495508	gi 7495508 pir T18993 hypothetical protein C06B8.1 - Caenorhabditis elegans emb CAB03850.1  (Z81463) Similarity to C.elegans zinc finger proteins, contains similarity to Pfam domain: PF00104 (Ligand-binding domain of nuclear hormone receptor), Score=13.7, E-value=0.051, N=1 [Caenorhabditis elegans]	2.9

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
1621	7288570	gi 7288570 gb AAF45170.1 AF218963_1 (AF218963) period [ <i>Drosophila miranda</i> ]	4.3
1622	7707666	gi 7707666 dbj BAA95343.1  (AB027560) ATPase subunit 6 [ <i>Echinococcus vogeli</i> ]	4.1
1625	4761646	gi 4761646 gb AAD29428.1 AF139060_1 (AF139060) transmembrane cell adhesion receptor MUA-3 precursor [ <i>Caenorhabditis elegans</i> ] emb CAA83226.2  (Z30974) contains similarity to Pfam domain: PF00057 (Low-density lipoprotein receptor domain class A), Score=52.9, E-value=2.2e-12, N=3, second half (former T20G5.3) contains similarity to Pfam domain: PF00008 (EGF-like domain), Score=326.3, E-value=1> emb CAC42345.1  (Z30423) contains similarity to Pfam domain: PF00057 (Low-density lipoprotein receptor domain class A), Score=52.9, E-value=2.2e-12, N=3, second half (former T20G5.3) contains similarity to Pfam domain: PF00008 (EGF-like domain), Score=326.3, E-value=1>	1.7
1626	3582424	gi 3582424 dbj BAA33057.1  (AB017255) arginine kinase two-domain chain [ <i>Pseudocardium sachalinensis</i> ]	4.5
1628	9758077	gi 9758077 dbj BAB08521.1  (AB009052) sucrose cleavage protein-like [ <i>Arabidopsis thaliana</i> ]	6.2
1629	11610630	gi 11610630 gb AAG37436.1  (AY013711) cyclin E [ <i>Mustela vison</i> ]	10
1631	4838093	gi 4838093 gb AAD30838.1  (AF103278) immunoglobulin heavy chain variable region [ <i>Homo sapiens</i> ]	3.3
1635	12045265	gi 12045265 ref NP_073076.1  ATP synthase F0, subunit B (atpF) [ <i>Mycoplasma genitalium</i> ] sp P47643 ATPF_MYCGE ATP SYNTHASE B CHAIN PRECURSOR pir F64244 ATP synthase B chain (atpF) - <i>Mycoplasma genitalium</i> gb AAC71631.1  (U39722) ATP synthase F0, subunit B (atpF) [ <i>Mycoplasma genitalium</i> ]	8.5
1636	627406	gi 627406 pir A54849 collagen alpha 1(VII) chain precursor - human	0.66
1643	2246540	gi 2246540 gb AAB62665.1  (U93872) glycoprotein M [ <i>Human herpesvirus 8</i> ]	1.5
1644	2388576	gi 2388576 gb AAB71457.1  (AC000098) YUP8H12.17 [ <i>Arabidopsis thaliana</i> ]	4.7

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
1645	7490184	gi 7490184 pir T37997 carboxypeptidase y - fission yeast (Schizosaccharomyces pombe) pir T43236 carboxypeptidase C (EC 3.4.16.5) precursor [validated] fission yeast (Schizosaccharomyces pombe) emb CAB10121.1  (Z97209) carboxypeptidase y [Schizosaccharomyces pombe] dbj BAA25568.1  (D86560) carboxypeptidase Y [Schizosaccharomyces pombe]	0.009
1646	7415597	gi 7415597 dbj BAA93452.1  (AB026494) acyltransferase homolog [Gentiana triflora]	6.1
1648	13541404	gi 13541404 ref NP_111092.1  DNA helicase (superfamily II) [Thermoplasma volcanium] dbj BAB59714.1  (AP000992) DNA helicase [Thermoplasma volcanium]	7.5
1649	6174902	gi 6174902 sp Q24767 PER_DROYA PERIOD CIRCADIAN PROTEIN pir S17286 period clock protein - fruit fly (Drosophila yakuba) emb CAA43439.1  (X61127) period [Drosophila yakuba]	0.2
1650	14318508	gi 14318508 ref NP_116641.1  Ies1p [Saccharomyces cerevisiae] sp P43579 YFB3_YEAST HYPOTHETICAL 78.8 KD PROTEIN IN HSP12-HXT10 INTERGENIC REGION pir S48316 probable membrane protein YFL013c - yeast (Saccharomyces cerevisiae) emb CAA86347.1  (Z46255) orf, len: 692, CAI: 0.14 [Saccharomyces cerevisiae] dbj BAA09225.1  (D50617) YFL013C [Saccharomyces cerevisiae]	8.8
1655	5052950	gi 5052950 gb AAD38784.1 AF149422_1 (AF149422) unknown [Homo sapiens]	0.000000007
1660	2988422	gi 2988422 gb AAC39776.1  (AF016903) agrin precursor [Homo sapiens]	3.4
1661	14756108	gi 14756108 ref XP_029883.1  EGF-like-domain, multiple 4 [Homo sapiens]	5
1664	10047313	gi 10047313 dbj BAB13444.1  (AB046838) KIAA1618 protein [Homo sapiens]	0.00001
1669	5902048	gi 5902048 ref NP_008974.1  HIV-1 rev binding protein 2; Rev interacting protein [Homo sapiens] pir G02629 Rev interacting protein Rip-1 - human gb AAB00557.1  (U55766) Rev interacting protein Rip-1 [Homo sapiens]	0.009

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
1672	13122465	gi 13122465 gb AAK12639.1 AF317654_1 (AF317654) G protein-coupled receptor [Homo sapiens]	2.4
1673	7296752	gi 7296752 gb AAF52030.1  (AE003603) CG12147 gene product [Drosophila melanogaster]	2.1
1681	14767950	gi 14767950 ref XP_040494.1  nuclear RNA export factor 5 [Homo sapiens] emb CAC20428.1  (AJ277654) nuclear RNA export factor 5 [Homo sapiens]	6.9
1684	14740021	gi 14740021 ref XP_033953.1  32575 [Homo sapiens] ref XP_033954.1  32576 [Homo sapiens] ref XP_033955.1  32577 [Homo sapiens]	2.5
1685	13568988	gi 13568988 gb AAK30843.1 AF254571_1 (AF254571) growth/differentiation factor 7 [Mus musculus]	5.8
1694	106323	gi 106323 pir A34087 hypothetical protein (L1H 5' region) - human	0.005
1695	7444442	gi 7444442 pir T02087 gag/pol polyprotein - maize retrotransposon Hopscotch gb AAA57005.1  (U12626) copia-like retrotransposon Hopscotch polyprotein [Zea mays]	0.49
1696	13569915	gi 13569915 ref NP_112205.1  amnionless protein [Homo sapiens] gb AAK28532.1 AF328788_1 (AF328788) amnionless [Homo sapiens]	4.4
1697	13812078	gi 13812078 ref NP_113215.1  hypothetical protein [Guillardia theta] gb AAF24011.1 AF083031_8 (AF083031) hypothetical protein [Guillardia theta]	5.2
1699	462193	gi 462193 sp Q06003 GOLI_DROME GOLIATH PROTEIN (G1 PROTEIN) pir JC1495 regulatory protein G1 - fruit fly (Drosophila melanogaster) gb AAA28582.1  (M97204) goliath protein [Drosophila melanogaster]	9.3
1702	13376638	gi 13376638 ref NP_079359.1  hypothetical protein FLJ21128 [Homo sapiens] dbj BAB15001.1  (AK024781) unnamed protein product [Homo sapiens]	5E-49
1705	7445803	gi 7445803 pir JC5348 cdd4 protein - Clostridium difficile emb CAA63569.1  (X92982) cdd4 [Clostridium difficile]	0.28
1706	10175016	gi 10175016 dbj BAB06115.1  (AP001515) BH2396~unknown [Bacillus halodurans]	9
1709	3953531	gi 3953531 dbj BAA34722.1  (AB015856) ATF6 [Homo sapiens]	9.1



Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
1712	14329676	gi 14329676 emb CAC40651.1  (AJ242782) centaurin beta [Homo sapiens]	0.00003
1714	10432382	gi 10432382 emb CAC10340.1  (AL139421) dJ717I23.1 (novel protein similar to Xenopus laevis Sojo protein) [Homo sapiens]	0.00006
1717	8247357	gi 8247357 emb CAB92957.1  (AJ401026) hypothetical protein [Thermoanaerobacter thermohydrosulfuricus]	1.4
1719	7487043	gi 7487043 pir T08926 hypothetical protein T15N24.50 - Arabidopsis thaliana emb CAB77061.1  (AL078465) putative protein [Arabidopsis thaliana] emb CAB79515.1  (AL161565) putative protein [Arabidopsis thaliana]	0.39
1721	13507765	gi 13507765 ref NP_109714.1  similar to GTPases [Mycoplasma pneumoniae] sp P75088 Y024_MYCPN PROBABLE GTP-BINDING PROTEIN MG024 HOMOLOG (B01_ORF362) pir S73454 probable GTP binding protein yyaF - Mycoplasma pneumoniae (strain ATCC 29342) gb AAB95776.1  (AE000015) similar to GTPases [Mycoplasma pneumoniae]	6
1725	11071788	gi 11071788 emb CAC14632.1  (AL449144) hypothetical protein P214.26 [Leishmania major]	9
1727	14325595	gi 14325595 dbj BAB60498.1  (AP000996) hypothetical protein [Thermoplasma volcanium]	2.5

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
1728	6498442	gi 6498442 dbj BAA87845.1  (AP000815) ESTs AU081301(E20138),C99280(E10593) correspond to a region of the predicted gene.~Similar to Arabidopsis thaliana chromosome II BAC T26B15 genomic sequence,unknown protein. (AC004681) [Oryza sativa] dbj BAB00648.2  (AP002804) ESTs AU081301(E20138),C99280(E10593) correspond to a region of the predicted gene.~Similar to Arabidopsis thaliana chromosome II BAC T26B15 genomic sequence; unknown protein (AC004681) [Oryza sativa] dbj BAB17744.1  (AP002862) contains ESTs AU081301(E20138),C99280(E10593)~similar to Arabidopsis thaliana chromosome 2, F12C20.11~unknown protein [Oryza sativa] dbj BAB44118.1  (AP003103) contains ESTs AU081301(E20138),C99280(E10593)~similar to Arabidopsis thaliana chromosome 2, F12C20.11~unknown protein [Oryza sativa]	1.1
1741	11467083	gi 11467083 ref NP_042559.1  NADH dehydrogenase, subunit 3 [Acanthamoeba castellanii] sp Q37382 NU3M_ACACA NADH-UBIQUINONE OXIDOREDUCTASE CHAIN 3 pir S53860 NADH dehydrogenase (ubiquinone) (EC 1.6.5.3) chain 3 - Acanthamoeba castellanii mitochondrion gb AAD11852.1  (U12386) NADH dehydrogenase, subunit 3 [Acanthamoeba castellanii]	5
1742	12843826	gi 12843826 dbj BAB26128.1  (AK009187) putative [Mus musculus]	0.00000002
1743	4928550	gi 4928550 gb AAD33637.1  (AF133876) DBL alpha protein [Plasmodium falciparum]	6.2
1744	6503033	gi 6503033 gb AAF14557.1 AF176666_1 (AF176666) F-box leucine-rich repeat protein 5 [Xenopus laevis]	3.8
1745	6562750	gi 6562750 emb CAB62889.1  (AL035475) hypothetical protein, MAL4P2.48 [Plasmodium falciparum]	8.9
1750	7498998	gi 7498998 pir T16057 hypothetical protein F13D11.2 - Caenorhabditis elegans	5.4
1751	6939792	gi 6939792 dbj BAA90658.1  (AB037920) HA-17 [Clostridium botulinum]	7.3

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
1754	14195008	gi 14195008 sp Q9JI55 PLE1_CRIGR PLECTIN 1 (PLTN) (PCN) (300-KDA INTERMEDIATE FILAMENT-ASSOCIATED PROTEIN) (IFAP300) gb AAF70372.1  (AF260753) plectin [Cricetulus griseus]	1.6
1756	74519	gi 74519 pir GNWVR4 structural polyprotein - rubella virus (strain Therien)	4.4
1760	6324076	gi 6324076 ref NP_014146.1  Ynl253wp [Saccharomyces cerevisiae] sp P53851 YNZ3_YEAST HYPOTHETICAL 47.2 KD PROTEIN IN SIP3-MRPL30 INTERGENIC REGION pir S63226 hypothetical protein YNL253w - yeast (Saccharomyces cerevisiae) emb CAA65491.1  (X96722) ORF N0860 [Saccharomyces cerevisiae] emb CAA96160.1  (Z71529) ORF YNL253w [Saccharomyces cerevisiae]	3.6
1762	1708082	gi 1708082 sp P50900 GUX2_CLOSR EXOGLUCANASE II PRECURSOR (EXOCELLOBIOHYDROLASE II) (1,4-BETA-CELLOBIOHYDROLASE II) (AVICELASE II) emb CAA93280.1  (Z69359) avicelase II [Clostridium stercorarium]	1.9
1765	2224838	gi 2224838 emb CAA45388.1  (X63974) putative protein-tyrosine phosphatase [Rhodobacter capsulatus]	5.2
1768	6513773	gi 6513773 gb AAF14748.1 AF197756_1 (AF197756) maturase [Hedyosmum arborescens]	0.63
1775	14732870	gi 14732870 ref XP_029018.1  hypothetical protein FLJ10647 [Homo sapiens] ref XP_001969.2  hypothetical protein FLJ10647 [Homo sapiens]	1.3
1779	7521942	gi 7521942 pir T29096 gag polyprotein - murine endogenous retrovirus ERV-L emb CAA73250.1  (Y12713) Gag polyprotein [Mus musculus]	0.071
1785	7508408	gi 7508408 pir T25251 hypothetical protein T24H10.4 - Caenorhabditis elegans emb CAA90944.1  (Z54216) T24H10.4 [Caenorhabditis elegans]	2.9
1788	7460247	gi 7460247 pir B71612 hypothetical protein PFB0555c - malaria parasite (Plasmodium falciparum) gb AAC71900.1  (AE001402) hypothetical protein [Plasmodium falciparum]	6.4

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
1789	4337102	gi 4337102 gb AAD18078.1 AAD18078 (AF129756) G6f [Homo sapiens]	2E-24
1792	1723494	gi 1723494 sp Q10413 YD88_SCHPO VERY HYPOTHETICAL 13.3 KD PROTEIN C1F3.08C IN CHROMOSOME I pir T38079 very hypothetical protein SPAC1F3.08c - fission yeast (Schizosaccharomyces pombe) emb CAA94626.1  (Z70690) very hypothetical protein [Schizosaccharomyces pombe]	7.2
1793	4589921	gi 4589921 dbj BAA76927.1  (AB017192) molybdopterin biosynthesis protein [Clostridium perfringens]	4.2
1799	7494302	gi 7494302 pir E71611 hypothetical protein PFB0580w - malaria parasite (Plasmodium falciparum) gb AAC71905.1  (AE001404) hypothetical protein [Plasmodium falciparum]	3.3
1800	14318508	gi 14318508 ref NP_116641.1  Ies1p [Saccharomyces cerevisiae] sp P43579 YFB3_YEAST HYPOTHETICAL 78.8 KD PROTEIN IN HSP12- HXT10 INTERGENIC REGION pir S48316 probable membrane protein YFL013c - yeast (Saccharomyces cerevisiae) emb CAA86347.1  (Z46255) orf, len: 692, CAI: 0.14 [Saccharomyces cerevisiae] dbj BAA09225.1  (D50617) YFL013C [Saccharomyces cerevisiae]	6.6
1802	14325595	gi 14325595 dbj BAB60498.1  (AP000996) hypothetical protein [Thermoplasma volcanium]	2
1809	7520399	gi 7520399 pir T11689 NADH dehydrogenase (ubiquinone) (EC 1.6.5.3) chain 5 - Graphium sarpedon mitochondrion (fragment) dbj BAA28187.1  (AB013147) NADH dehydrogenase subunit 5 [Graphium sarpedon]	4.9
1816	423981	gi 423981 pir A46193 88K E-26-specific domain protein Pok - fruit fly (Drosophila melanogaster) dbj BAA01080.1  (D10228) Ets domain protein [Drosophila melanogaster]	0.23
1818	7463036	gi 7463036 pir C70177 beta-glucosidase homolog - Lyme disease spirochete gb AAC66976.1  (AE001163) beta-glucosidase, putative [Borrelia burgdorferi]	8.4
1819	3851471	gi 3851471 gb AAC72292.1  (AF037295) sulfonylurea receptor-1 [Mus musculus]	3.4

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
1820	9845030	gi 9845030 dbj BAB11914.1  (AB034726) 5-oxoprolinase precursor [ <i>Alcaligenes faecalis</i> ]	5.8
1821	6599044	gi 6599044 emb CAB63584.1  (AJ251826) BMP2/4 protein [ <i>Asterias rubens</i> ]	6.7
1822	7715984	gi 7715984 gb AAF68235.1 AF206244_1 (AF206244) seroreactive antigen BMN1-2 [ <i>Babesia microti</i> ]	0.067
1823	7293329	gi 7293329 gb AAF48709.1  (AE003504) CG5162 gene product [ <i>Drosophila melanogaster</i> ]	2.8
1824	2136095	gi 2136095 pir I58381 receptor tyrosine kinase isoform FLT4 long - human (fragment) gb AAB28539.1  (S66407) receptor tyrosine kinase isoform FLT4 long, FLT41 {C-terminal} [human, Peptide Partial, 71 aa] [ <i>Homo sapiens</i> ]	0.0007
1826	7522093	gi 7522093 pir T30809 plasminogen related growth factor receptor 3 - <i>Fugu rubripes</i> emb CAA09086.1  (AJ010317) plasminogen related growth factor receptor 3 [ <i>Takifugu rubripes</i> ]	4.7
1832	13622999	gi 13622999 gb AAK34670.1  (AE006621) hypothetical protein [ <i>Streptococcus pyogenes</i> M1 GAS]	3.7
1834	6319504	gi 6319504 ref NP_009586.1  Ybr030wp [ <i>Saccharomyces cerevisiae</i> ] sp P38222 YBO0_YEAST HYPOTHETICAL 62.6 KD PROTEIN IN CDS1-RPL4A INTERGENIC REGION pir S45886 hypothetical protein YBR030w - yeast ( <i>Saccharomyces cerevisiae</i> ) emb CAA53686.1  (X76078) YBR0314 [ <i>Saccharomyces cerevisiae</i> ] emb CAA84972.1  (Z35899) ORF YBR030w [ <i>Saccharomyces cerevisiae</i> ] prf 2206497K ORF YBR0314 [ <i>Saccharomyces cerevisiae</i> ]	0.65
1835	7290986	gi 7290986 gb AAF46425.1  (AE003445) CG3898 gene product [ <i>Drosophila melanogaster</i> ]	3.1
1840	14725330	gi 14725330 ref XP_002254.2  mitochondrial translational initiation factor 2 precursor [ <i>Homo sapiens</i> ]	4.2

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
1842	7509362	gi 7509362 pir T31492 hypothetical protein Y116A8C.20 - <i>Caenorhabditis elegans</i> emb CAB55126.1  (AL117204) predicted using Genefinder~contains similarity to Pfam domain: PF00642 (Zinc finger C-x8-C-x5-C-x3-H type (and similar).), Score=71.0, E-value=3.1e-19, N=2~cDNA EST yk247a8.5 comes from this gene [ <i>Caenorhabditis elegans</i> ]	8.4
1846	6093793	gi 6093793 sp Q64181 PROP_CAVPO PROPERDIN PRECURSOR gb AAB35918.1  (S81116) properdin [guinea pigs, spleen, Peptide, 470 aa] [ <i>Cavia</i> ]	4.1
1848	7300538	gi 7300538 gb AAF55691.1  (AE003727) CG7411 gene product [ <i>Drosophila melanogaster</i> ]	2.7
1849	1730077	gi 1730077 sp P18160 KYK1_DICDI NON-RECEPTOR TYROSINE KINASE SPORE LYSIS A (TYROSINE-PROTEIN KINASE 1) pir T18276 non-receptor tyrosine kinase - slime mold ( <i>Dictyostelium discoideum</i> ) gb AAB41125.1  (U32174) non-receptor tyrosine kinase [ <i>Dictyostelium discoideum</i> ]	8.4
1851	5326919	gi 5326919 emb CAB46239.1  (AJ133488) SCOSpondin [ <i>Bos taurus</i> ]	2.7
1853	13811938	gi 13811938 emb CAC03433.2  (AL118505) dJ1056H1.2.1 (novel protein similar to mitogen inducible protein MIG-2 (isoform 1)) [ <i>Homo sapiens</i> ]	2E-21
1859	8954377	gi 8954377 ref NP_059365.1  haem lyase [ <i>Cyanidioschyzon merolae</i> ] pir A58932 cytochrome C-type biogenesis protein CCMF - <i>Cyanidioschyzon merolae</i> mitochondrion dbj BAA36527.1  (D89861) cytochrome C-type biogenesis protein CCMF [ <i>Cyanidioschyzon merolae</i> ]	2.3
1860	13376638	gi 13376638 ref NP_079359.1  hypothetical protein FLJ21128 [ <i>Homo sapiens</i> ] dbj BAB15001.1  (AK024781) unnamed protein product [ <i>Homo sapiens</i> ]	2E-47
1862	14602664	gi 14602664 gb AAH09855.1 AAH09855 (BC009855) Similar to nucleolin [ <i>Homo sapiens</i> ]	4E-45

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
1864	7512078	gi 7512078 pir T30879 dynein heavy chain isotype 5A - sea urchin (Tripneustes gratilla) (fragment) gb AAA63591.1  (U03977) dynein heavy chain isotype 5A [Tripneustes gratilla]	1.7
1865	7688347	gi 7688347 emb CAB89836.1  (AJ242516) AmpE protein [Salmonella typhimurium]	2.8
1867	4758568	gi 4758568 ref NP_004497.1  heat shock transcription factor 2 [Homo sapiens] ref XP_004466.2  heat shock transcription factor 2 [Homo sapiens] ref XP_051573.1  heat shock transcription factor 2 [Homo sapiens] sp Q03933 HSF2_HUMAN HEAT SHOCK FACTOR PROTEIN 2 (HSF 2) (HEAT SHOCK TRANSCRIPTION FACTOR 2) (HSTF 2) pir A41138 heat shock transcription factor HSF2 - human gb AAA36017.1  (M65217) HSF2 [Homo sapiens]	0.33
1869	13358509	gi 13358509 ref NP_078688.1  orf107 [lymphocystis disease virus 1]	8.1
1870	6580323	gi 6580323 emb CAB63392.1  (AL132864) cDNA EST EMBL:T00048 comes from this gene~cDNA EST EMBL:T00047 comes from this gene~cDNA EST yk390e6.3 comes from this gene~cDNA EST yk512a3.3 comes from this gene~cDNA EST yk512a3.5 comes from this gene~cDNA EST yk532a2.3 comes from this ge>	0.012
1871	11359776	gi 11359776 pir T45059 hypothetical protein Y39B6B.gg [imported] - Caenorhabditis elegans emb CAB60938.1  (AL132896) predicted using Genefinder; preliminary prediction [Caenorhabditis elegans]	3.6
1876	5453171	gi 5453171 gb AAD43464.1  (AF113915) pre-mRNA splicing factor [Heterodera glycines]	2.1
1877	5453171	gi 5453171 gb AAD43464.1  (AF113915) pre-mRNA splicing factor [Heterodera glycines]	2.1
1880	14752353	gi 14752353 ref XP_050519.1  annexin A2 [Homo sapiens]	0.27
1881	7494821	gi 7494821 pir T31996 hypothetical protein B0281.5 - Caenorhabditis elegans gb AAB66084.1  (AF016666) similar to human tumor necrosis factor-alpha-induced protein B12 (NID:g179304) [Caenorhabditis elegans]	3.8

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
1883	480482	gi 480482 pir  S36953 cytochrome-c oxidase (EC 1.9.3.1) chain III - Herpetomonas samuelpessoai mitochondrion gb AAD09166.1  (L10852) cytochrome oxidase subunit III [Herpetomonas pessoai]	0.78
1885	5174493	gi 5174493 ref NP_006050.1  laminin, gamma 3 precursor [Homo sapiens] gb AAD36991.1 AF041835_1 (AF041835) laminin gamma 3 chain precursor [Homo sapiens]	3E-12
1886	8922792	gi 8922792 ref NP_060753.1  hypothetical protein FLJ10956 [Homo sapiens] ref XP_007214.2  hypothetical protein FLJ10956 [Homo sapiens] dbj BAA91925.1  (AK001818) unnamed protein product [Homo sapiens]	5E-39
1889	7479561	gi 7479561 pir  T35135 hypothetical protein SC4H8.04c SC4H8.04c - Streptomyces coelicolor emb CAA15871.1  (AL020958) hypothetical protein SC4H8.04c [Streptomyces coelicolor A3(2)]	0.5
1890	7461128	gi 7461128 pir  T03057 hypothetical protein 032R - Chilo iridescent virus gb AAB94431.1  (AF003534) hypothetical protein 032R [Chilo iridescent virus]	0.33
1891	8778367	gi 8778367 gb AAF79375.1 AC007887_34 (AC007887) F15O4.28 [Arabidopsis thaliana]	6.6
1894	13475247	gi 13475247 ref NP_106811.1  unknown protein [Mesorhizobium loti] dbj BAB52597.1  (AP003008) unknown protein [Mesorhizobium loti]	2.3
1895	2285958	gi 2285958 emb CAA70903.1  (Y09763) GABRE [Homo sapiens]	2.7
1896	14729939	gi 14729939 ref XP_038475.1  DKFZP564J102 protein [Homo sapiens]	0.007
1898	7504499	gi 7504499 pir  T32750 hypothetical protein F57B10.1 - Caenorhabditis elegans gb AAB96719.1  (AF039713) Hypothetical protein F57B10.1 [Caenorhabditis elegans]	4.2
1900	10581310	gi 10581310 gb AAG20067.1  (AE005086) methionyl aminopeptidase; Map [Halobacterium sp. NRC-1]	8.9
1902	111814	gi 111814 pir  S21347 hypothetical protein 3 - rat emb CAA37646.1  (X53581) ORF3 [Rattus norvegicus]	0.3
1903	7290766	gi 7290766 gb AAF46211.1  (AE003439) CG4557 gene product [Drosophila melanogaster]	0.38



Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
1904	5139521	gi 5139521 emb CAB45562.1  (AJ238798) CTRP protein [Plasmodium berghei] dbj BAA82322.1  (AB027129) adhesive protein-like molecule [Plasmodium berghei] gb AAF73158.1 AF149771_1 (AF149771) ookinete protein [Plasmodium berghei]	8
1905	7489900	gi 7489900 pir T18287 protein-tyrosine kinase (EC 2.7.1.112) - slime mold (Dictyostelium discoideum) gb AAB04999.1  (U64830) protein tyrosine kinase [Dictyostelium discoideum]	5.3
1908	6002776	gi 6002776 gb AAF00134.1 AF149806_1 (AF149806) hypothetical protein [Oryza sativa]	0.15
1913	14773348	gi 14773348 ref XP_038450.1  20849 [Homo sapiens]	2E-50
1916	7301187	gi 7301187 gb AAF56319.1  (AE003748) CG5794 gene product [Drosophila melanogaster]	8
1918	3378685	gi 3378685 emb CAA76071.1  (Y16104) replicase protein [Physalis mottle tymovirus]	0.13
1919	4501915	gi 4501915 ref NP_003807.1  a disintegrin and metalloproteinase domain 9 preproprotein; meltrin gamma [Homo sapiens] gb AAC50403.1  (U41766) metalloprotease/disintegrin/cysteine-rich protein precursor [Homo sapiens]	0.002
1922	14587070	gi 14587070 gb AAK70463.1 AF387344_4 (AF387344) spore germination protein GerLC [Bacillus cereus]	8.4
1924	7291161	gi 7291161 gb AAF46595.1  (AE003450) CG2892 gene product [Drosophila melanogaster]	6
1925	7446016	gi 7446016 pir E70895 hypothetical glycine-rich protein Rv1087 - Mycobacterium tuberculosis (strain H37RV) emb CAA17203.1  (AL021897) PE_PGRS [Mycobacterium tuberculosis]	3.6
1926	11595522	gi 11595522 emb CAC18316.1  (AL451022) hypothetical protein [Neurospora crassa]	5.9
1930	14043326	gi 14043326 gb AAH07658.1 AAH07658 (BC007658) Unknown (protein for MGC:747) [Homo sapiens]	8E-76
1931	13810543	gi 13810543 dbj BAB43950.1  (AB051633) ookinete surface protein Pos28-2 [Plasmodium ovale]	3.1
1933	7206826	gi 7206826 gb AAF39985.1  (AC006696) contains similarity to other proline-rich proteins [Caenorhabditis elegans]	6.6

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
1934	14749721	gi 14749721 ref XP_027893.1  similar to ALU SUBFAMILY SB1 SEQUENCE CONTAMINATION WARNING ENTRY (H. sapiens) [Homo sapiens]	2.1
1935	12324211	gi 12324211 gb AAG52077.1 AC012679_15 (AC012679) putative proline-rich protein precursor; 93710-91881 [Arabidopsis thaliana]	2.1
1940	4204305	gi 4204305 gb AAD10686.1  (AC003027) Hypothetical protein [Arabidopsis thaliana]	5.4
1955	14783118	gi 14783118 ref XP_043478.1  hypothetical protein XP_043478 [Homo sapiens]	4.7
1959	13375860	gi 13375860 ref NP_078907.1  hypothetical protein FLJ23342 [Homo sapiens] dbj BAB15618.1  (AK026995) unnamed protein product [Homo sapiens]	0.2
1962	7304316	gi 7304316 gb AAF59348.1  (AE003844) CG2052 gene product [Drosophila melanogaster]	8.2
1963	7513579	gi 7513579 pir T09064 1-acylglycerol-3-phosphate O-acyltransferase (EC 2.3.1.51) - mouse gb AAB82009.1  (AF030001) lysophatidic acid acyl transferase-alpha [Mus musculus]	1.1
1964	7512671	gi 7512671 pir T12545 hypothetical protein DKFZp434N074.1 - human (fragments) emb CAB46377.1  (AL096732) hypothetical protein [Homo sapiens]	3.1
1972	13249541	gi 13249541 gb AAK15414.1  (AY015597) dissimilatory sulfite reductase subunit B [uncultured sulfate-reducing bacterium]	2
1976	8134766	gi 8134766 sp Q9ZES2 TRPE_BUCTC ANTHRANILATE SYNTHASE COMPONENT I emb CAA09993.1  (AJ012333) anthranilate synthase large subunit [Buchnera aphidicola]	5.6
1977	7518768	gi 7518768 pir A71111 hypothetical protein PH0656 - Pyrococcus horikoshii dbj BAA29747.1  (AP000003) 107aa long hypothetical protein [Pyrococcus horikoshii]	9.3
1982	14749721	gi 14749721 ref XP_027893.1  similar to ALU SUBFAMILY SB1 SEQUENCE CONTAMINATION WARNING ENTRY (H. sapiens) [Homo sapiens]	1.9

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
1983	2498123	gi 2498123 sp O02833 ALS_PAPHA INSULIN-LIKE GROWTH FACTOR BINDING PROTEIN COMPLEX ACID LABILE CHAIN PRECURSOR (ALS) pir JC5239 insulin-like growth factor acid-labile chain - baboon	4.4
1990	2911545	gi 2911545 emb CAA75449.1  (Y15173) E6 protein [Human papillomavirus type 75]	4.2
1992	1090764	gi 1090764 prf 2019432A cyclin-dependent kinase 5 activator [Bos taurus]	2.1
1993	7446170	gi 7446170 pir T02529 myb-related protein F13M22.13 - Arabidopsis thaliana gb AAC23633.1  (AC004684) putative MYB family transcription factor [Arabidopsis thaliana] gb AAD53101.1 AF175996_1 (AF175996) putative transcription factor [Arabidopsis thaliana]	5.9
1994	4501915	gi 4501915 ref NP_003807.1  a disintegrin and metalloproteinase domain 9 preproprotein; meltrin gamma [Homo sapiens] gb AAC50403.1  (U41766) metalloprotease/disintegrin/cysteine-rich protein precursor [Homo sapiens]	0.002
1997	12853260	gi 12853260 dbj BAB29697.1  (AK015063) putative [Mus musculus]	6.1
2000	6492289	gi 6492289 gb AAF14258.1 AF137068_1 (AF137068) cubilin [Canis familiaris]	4.6
2001	2828501	gi 2828501 sp P40899 ISP3_SCHPO SEXUAL DIFFERENTIATION PROCESS PROTEIN ISP3 pir T38112 sexual differentiation process protein isp3 - fission yeast (Schizosaccharomyces pombe) emb CAB03599.1  (Z81312) sexual differentiation process protein isp3; meiotic expression upregulated [Schizosaccharomyces pombe]	7.9
2022	4206157	gi 4206157 gb AAD11433.1  (AF109404) transposase [Streptomyces scabiei]	3.4
2026	11466224	gi 11466224 ref NP_062847.1  ORF1, contains 4 trans membrane regions, putative [Physarum polycephalum] dbj BAB08081.1  (AB027295) ORF1, contains 4 trans membrane regions, putative [Physarum polycephalum]	1.2

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
2027	7507536	gi 7507536 pir T24739 hypothetical protein T09E11.4 - <i>Caenorhabditis elegans</i> emb CAB03533.1  (Z81147) contains similarity to Pfam domain: PF01757 (Domain of unknown function), Score=594.0, E-value=3e-175, N=1 [ <i>Caenorhabditis elegans</i> ]	4.3
2028	6102749	gi 6102749 emb CAB59307.1  (AJ236287) NADH dehydrogenase subunit F [ <i>Carphalea glaucescens</i> ]	1.9
2031	7486224	gi 7486224 pir T08553 hypothetical protein F27B13.160 - <i>Arabidopsis thaliana</i> emb CAB43667.1  (AL050352) putative protein [ <i>Arabidopsis thaliana</i> ] emb CAB79750.1  (AL161575) putative protein [ <i>Arabidopsis thaliana</i> ]	2.7
2032	7462619	gi 7462619 pir F72210 hypothetical protein TM1801 - <i>Thermotoga maritima</i> (strain MSB8) gb AAD36864.1 AE001817_11 (AE001817) hypothetical protein [ <i>Thermotoga maritima</i> ]	6.2
2035	7296128	gi 7296128 gb AAF51422.1  (AE003587) CG4629 gene product [ <i>Drosophila melanogaster</i> ]	3.4
2038	14760974	gi 14760974 ref XP_034809.1  similar to putative gag-pro-pol polyprotein ( <i>H. sapiens</i> ) [ <i>Homo sapiens</i> ]	1E-13
2041	14601134	gi 14601134 ref NP_147662.1  hypothetical protein [ <i>Aeropyrum pernix</i> ] pir H72698 hypothetical protein APE1008 - <i>Aeropyrum pernix</i> (strain K1) dbj BAA79992.1  (AP000060) 123aa long hypothetical protein [ <i>Aeropyrum pernix</i> ]	2.6
2043	4507537	gi 4507537 ref NP_003260.1  nuclear receptor subfamily 2, group E, member 1; tailless ( <i>Drosophila</i> ) homolog; tailless homolog ( <i>Drosophila</i> ) [ <i>Homo sapiens</i> ] ref XP_004530.1  54551 [ <i>Homo sapiens</i> ] ref XP_038737.1  nuclear receptor subfamily 2, group E, member 1 [ <i>Homo sapiens</i> ] sp Q9Y466 NR21_HUMAN ORPHAN NUCLEAR RECEPTOR NR2E1 (NUCLEAR RECEPTOR TLX) (TAILLESS HOMOLOG) (TLL) (HTLL) emb CAA73725.1  (Y13276) Tailless protein [ <i>Homo sapiens</i> ] emb CAB75626.1  (AL078596) dJ429G5.1 (nuclear receptor subfamily 2, group E, member 1) [ <i>Homo sapiens</i> ] gb AAG31945.1 AF220532_1 (AF220532) orphan nuclear receptor [ <i>Homo sapiens</i> ]	9E-10

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
2044	7300319	gi 7300319 gb AAF55480.1  (AE003719) CG7305 gene product [ <i>Drosophila melanogaster</i> ]	3.3
2046	7498832	gi 7498832 pir T34212 hypothetical protein F10E7.4 - <i>Caenorhabditis elegans</i> gb AAA82427.1  (U41264) coded for by <i>C. elegans</i> cDNA yk99a6.5; coded for by <i>C. elegans</i> cDNA yk72g6.5; coded for by <i>C. elegans</i> cDNA yk99a6.3; coded for by <i>C. elegans</i> cDNA yk72g6.3; coded for by <i>C. elegans</i> cDNA yk127a2.5; coded for by <i>C. elegans</i> cDNA yk127a2.3; Simila>	9.7
2050	13643847	gi 13643847 ref XP_011044.2  8-oxoguanine DNA glycosylase [ <i>Homo sapiens</i> ] ref XP_016414.1  8-oxoguanine DNA glycosylase [ <i>Homo sapiens</i> ] ref XP_016415.1  8-oxoguanine DNA glycosylase [ <i>Homo sapiens</i> ] ref XP_031967.1  8-oxoguanine DNA glycosylase [ <i>Homo sapiens</i> ] ref XP_031959.1  8-oxoguanine DNA glycosylase, isoform 2d [ <i>Homo sapiens</i> ] ref XP_031961.1  8-oxoguanine DNA glycosylase, isoform 1a [ <i>Homo sapiens</i> ] ref XP_052277.1  similar to 8-oxoguanine DNA glycosylase ( <i>H. sapiens</i> ) [ <i>Homo sapiens</i> ]	1.2
2051	7474551	gi 7474551 pir E69792 conserved hypothetical protein yeeA - <i>Bacillus subtilis</i> emb CAB12496.1  (Z99107) similar to hypothetical proteins [ <i>Bacillus subtilis</i> ]	7
2060	3913201	gi 3913201 sp Q58511 CCA_METJA TRNA NUCLEOTIDYLTRANSFERASE (TRNA ADENYLYLTRANSFERASE) (TRNA CCA-PYROPHOSPHORYLASE) (CCA-ADDING ENZYME) gb AAB99114.1  (U67554) tRNA nucleotidyltransferase (cca) [ <i>Methanococcus jannaschii</i> ]	5.9
2072	13186342	gi 13186342 gb AAK15384.1  (AF211134) valyl-tRNA synthetase [ <i>Carsonella ruddii</i> ]	2.8

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
2075	6225820	gi 6225820 sp O04226 P5CS_ORYSA DELTA 1-PYRROLINE-5-CARBOXYLATE SYNTHETASE (P5CS) [INCLUDES: GLUTAMATE 5-KINASE (GAMMA-GLUTAMYL KINASE) (GK); GAMMA-GLUTAMYL PHOSPHATE REDUCTASE (GPR) (GLUTAMATE-5-SEMIALDEHYDE DEHYDROGENASE) (GLUTAMYL-GAMMA-SEMIALDEHYDE DEHYDROGENASE)] pir T03695 delta 1 pyrroline-5-carboxylate synthetase - rice dbj BAA19916.1  (D49714) delta1-pyrroline-5-carboxylate synthetase [Oryza sativa]	9.4
2077	4028153	gi 4028153 gb AAC96117.1  (AF083221) putative neurotransmitter receptor [Takifugu rubripes]	2
2080	4902680	gi 4902680 emb CAB43550.1  (AL031673) dJ694B14.3 (novel haloacid dehalogenase-like hydrolase family protein similar to (archaea) bacterial proteins) [Homo sapiens]	2.9
2084	6322760	gi 6322760 ref NP_012833.1  Ykl090wp [Saccharomyces cerevisiae] sp P36075 YKJ0_YEAST HYPOTHETICAL 50.9 KD PROTEIN IN BUD2-MIF2 INTERGENIC REGION pir S37915 hypothetical protein YKL090w - yeast (Saccharomyces cerevisiae) emb CAA81928.1  (Z28090) ORF YKL090w [Saccharomyces cerevisiae]	2.8
2085	6635084	gi 6635084 emb CAB64573.1  (AL135930) hypothetical protein L4738.02 [Leishmania major]	3.6
2086	7487726	gi 7487726 pir T05814 hypothetical protein T5K18.90 - Arabidopsis thaliana emb CAA18618.1  (AL022580) hypothetical protein [Arabidopsis thaliana] emb CAB78933.1  (AL161550) hypothetical protein [Arabidopsis thaliana]	5.9
2089	13385468	gi 13385468 ref NP_080247.1  RIKEN cDNA 2900001A12 gene [Mus musculus] dbj BAB28377.1  (AK012645) putative [Mus musculus] dbj BAB28865.1  (AK013457) putative [Mus musculus]	4E-11
2090	14742770	gi 14742770 ref XP_039393.1  KIAA1550 protein [Homo sapiens]	3.2
2092	2982251	gi 2982251 gb AAC32113.1  (AF051208) putative RNA-binding protein [Picea mariana]	7.6

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
2095	12718478	gi 12718478 emb CAC28807.1  (AL513466) hypothetical protein [ <i>Neurospora crassa</i> ]	3.1
2096	5532964	gi 5532964 gb AAD44957.1  (AF156655) MHC class I heavy chain [ <i>Ambystoma mexicanum</i> ]	9.3
2097	1711658	gi 1711658 sp P54797 T10_MOUSE_SER/THR-RICH PROTEIN T10 IN DGCR REGION pir S37488 gene T10 protein - mouse emb CAA52612.1  (X74504) T10 [ <i>Mus musculus</i> ]	4.3
2098	14193393	gi 14193393 gb AAK55953.1 AF268062_2 (AF268062) RNA polymerase beta-prime subunit [ <i>Candidatus Carsonella ruddii</i> ]	2.1
2099	7243081	gi 7243081 dbj BAA92588.1  (AB037771) KIAA1350 protein [ <i>Homo sapiens</i> ]	7E-97
2100	11357181	gi 11357181 pir T49996 AtAGP4 - <i>Arabidopsis thaliana</i> gb AAC77826.1  (AF082301) arabinogalactan-protein [ <i>Arabidopsis thaliana</i> ] gb AAD38870.1 AF060874_1 (AF060874) AtAGP4 [ <i>Arabidopsis thaliana</i> ] emb CAB89400.1  (AL353995) AtAGP4 [ <i>Arabidopsis thaliana</i> ] gb AAK49601.1 AF372885_1 (AF372885) AT5g10430/F12B17_220 [ <i>Arabidopsis thaliana</i> ] gb AAK68734.1  (AY042794) AtAGP4 [ <i>Arabidopsis thaliana</i> ]	1.2
2103	7497369	gi 7497369 pir T32512 hypothetical protein C44B12.4 - <i>Caenorhabditis elegans</i> gb AAB88327.1  (AF036692) Hypothetical protein C44B12.4 [ <i>Caenorhabditis elegans</i> ]	6.7
2109	14485227	gi 14485227 gb AAK62977.1 AF384372_3 (AF384372) surface antigen [ <i>Hepatitis B virus</i> ]	5.7
2111	9711862	gi 9711862 dbj BAB07956.1  (AP002524) putative extensin-like protein [ <i>Oryza sativa</i> ] dbj BAB33013.1  (AP003118) putative extensin-like protein [ <i>Oryza sativa</i> ]	10
2114	9759203	gi 9759203 dbj BAB09740.1  (AB015476) heat shock transcription factor HSF30-like protein [ <i>Arabidopsis thaliana</i> ]	8.4
2115	204070	gi 204070 gb AAA41130.1  (M22030) electron transfer flavoprotein alpha-subunit [ <i>Rattus norvegicus</i> ]	0.75
2117	3638957	gi 3638957 gb AAC36301.1  (AC004877) sco-spondin-mucin-like; similar to P98167 (PID:g1711548); details of intron/exon structure uncertain [ <i>Homo sapiens</i> ]	8.1

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
2121	14250436	gi 14250436 gb AAH08653.1 AAH08653 (BC008653) Similar to LRP16 protein [Mus musculus]	9.3
2126	14760522	gi 14760522 ref XP_038798.1  7371 [Homo sapiens] gb AAK01445.1  (AF334585) NIR3 [Homo sapiens]	5E-39
2134	3024944	gi 3024944 sp Q58366 Y956_METJA HYPOTHETICAL PROTEIN MJ0956 pir D64419 hypothetical protein MJ0956 - Methanococcus jannaschii gb AAB98969.1  (U67539) M. jannaschii predicted coding region MJ0956 [Methanococcus jannaschii]	8.4
2135	6606266	gi 6606266 gb AAF19148.1 AF158634_1 (AF158634) Vrg1 [Aegilops ventricosa]	7.1
2137	1729878	gi 1729878 sp P54410 TCPH_TETTH T-COMPLEX PROTEIN 1, ETA SUBUNIT (TCP-1-ETA) (CCT- ETA) pir S71338 t-complex protein 1 theta chain - Tetrahymena thermophila (fragment) gb AAC47007.1  (U46028) CCTeta [Tetrahymena thermophila] prf 2209286B chaperonin CCT-eta [Tetrahymena thermophila]	4.4
2141	3688193	gi 3688193 emb CAA08995.1  (AJ010091) MAP3K alpha 1 protein kinase [Brassica napus]	6.9
2142	7491910	gi 7491910 pir T41367 hypothetical protein SPCC4G3.09c - fission yeast (Schizosaccharomyces pombe) emb CAB09776.1  (Z97052) hypothetical protein [Schizosaccharomyces pombe]	3.3
2144	6513832	gi 6513832 gb AAF14807.1 AF197815_1 (AF197815) maturase [Alisma plantago-aquatica]	1.5
2148	6323084	gi 6323084 ref NP_013156.1  transcription factor, probable member of histone acetyltransferase SAGA complex; Spt8p [Saccharomyces cerevisiae] sp P38915 SPT8_YEAST TRANSCRIPTION FACTOR SPT8 pir S47898 transcription factor SPT8 - yeast (Saccharomyces cerevisiae) gb AAA53585.1  (M94955) transcription factor [Saccharomyces cerevisiae] emb CAA64302.1  (X94607) transcription factor [Saccharomyces cerevisiae] emb CAA97585.1  (Z73227) ORF YLR055c [Saccharomyces cerevisiae]	5.8



Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
2151	1074219	gi 1074219 pir S49239 hypothetical protein 2 (capsulation locus) - Haemophilus influenzae (strain RM107)	4
2153	10946710	gi 10946710 ref NP_067350.1  Rhesus blood group-associated B glycoprotein; Rh type B glycoprotein [Mus musculus] gb AAF19371.1  (AF193808) Rh type B glycoprotein [Mus musculus]	3.5
2159	9625644	gi 9625644 ref NP_039895.1  BDLF2 late reading frame [Human herpesvirus 4] sp P03225 BDL2_EBV PROTEIN BDLF2 pir QQBE44 BDLF2 protein - human herpesvirus 4 (strain B95-8) emb CAA24836.1  (V01555) BDLF2 late reading frame [Human herpesvirus 4]	3.7
2160	220578	gi 220578 dbj BAA00447.1  (D00570) open reading frame (251 AA) [Mus musculus]	4.7
2165	9633076	gi 9633076 ref NP_050182.1  B4 [Human herpesvirus 6B] pir T44148 hypothetical protein B4 [imported] - human herpesvirus 6 (strain Z29) gb AAD49620.1 AF157706_7 (AF157706) B4 [Human herpesvirus 6B]	0.057
2168	135838	gi 135838 sp P01267 THYG_BOVIN THYROGLOBULIN PRECURSOR pir UIBO thyroglobulin precursor - bovine emb CAA26584.1  (X02815) thyroglobulin precursor [Bos taurus] prf 1109240A thyroglobulin [Bos taurus]	2
2173	11360154	gi 11360154 pir T46337 hypothetical protein DKFZp434O2413.1 - human (fragment) emb CAB70664.1  (AL137265) hypothetical protein [Homo sapiens]	3.7
2177	181400	gi 181400 gb AAA35748.1  (M34225) cytokeratin 8 [Homo sapiens]	7E-53
2181	11347010	gi 11347010 pir B81303 probable membrane protein Cj1013c [imported] - Campylobacter jejuni (strain NCTC 11168) emb CAB73269.1  (AL139077) putative membrane protein [Campylobacter jejuni]	0.1
2182	8745261	gi 8745261 gb AAF78857.1 AF134516_1 (AF134516) VP4 [Banna virus]	6

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
2183	285275	gi 285275 pir A43963 envelope glycoprotein G(envelope glycoprotein G1, envelope glycoprotein G2) - Hantavirus sp.=Puumala virus gb AAB22506.1  envelope glycoprotein G(envelope glycoprotein G1, envelope glycoprotein G2) [Hantavirus sp.=Puumala virus, Hallnas strain, Peptide, 1148 aa]	0.6
2186	7506378	gi 7506378 pir T23989 hypothetical protein R07A4.3 - Caenorhabditis elegans emb CAA91763.1  (Z67756) cDNA EST yk63e10.5 comes from this gene~cDNA EST yk63e10.3 comes from this gene [Caenorhabditis elegans]	8.9
2187	4511976	gi 4511976 gb AAD21536.1  (AF088896) unknown [Zymomonas mobilis]	0.65
2188	14761847	gi 14761847 ref XP_017198.2  hypothetical protein FLJ12085 [Homo sapiens]	3E-13
2192	5835478	gi 5835478 ref NP_008404.1 CYTB_13475 cytochrome b [Balanoglossus carnosus] pir T11138 ubiquinol--cytochrome-c reductase (EC 1.10.2.2) cytochrome b - acorn worm mitochondrion gb AAD11951.1  (AF051097) cytochrome b [Balanoglossus carnosus]	0.95
2195	14906463	gi 14906463 gb AAK72690.1  (AY039648) transcription factor Rel 1 [Crassostrea gigas]	9.3
2196	6680964	gi 6680964 ref NP_031758.1  procollagen, type XVII, alpha 1 [Mus musculus] pir A46053 bullous pemphigoid antigen, BPAG2, type XVII collagen alpha 1-chain - mouse gb AAA37443.1  (L08407) collagen type XVII [Mus musculus]	6.8
2197	7206631	gi 7206631 gb AAF39790.1  (AC006631) Hypothetical protein F27B3.2 [Caenorhabditis elegans]	4.3
2201	2564679	gi 2564679 gb AAB81836.1  (AF023484) putative KP78 protein kinase [Drosophila melanogaster]	0.83
2204	9558143	gi 9558143 emb CAC00269.1  (AL160371) possible f16d3.1 protein [Leishmania major]	5.3
2205	13813146	gi 13813146 gb AAK40384.1  (AE006643) ATP-dependent helicase [Sulfolobus solfataricus]	4.3
2206	7662168	gi 7662168 ref NP_055497.1  KIAA0535 gene product [Homo sapiens] dbj BAA25461.1  (AB011107) KIAA0535 protein [Homo sapiens]	0.0003

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
2214	9229890	gi 9229890 dbj BAB00618.1  (AB036841) prickles 2 [Ciona intestinalis]	4.4
2217	3435174	gi 3435174 gb AAC32342.1  (AF061251) O antigen flippase Wzx [Escherichia coli] gb AAG57097.1 AE005429_8 (AE005429) O antigen flippase Wzx [Escherichia coli O157:H7 EDL933]	2.5
2225	5725923	gi 5725923 gb AAD48242.1 AF089987_1 (AF089987) four-loop conotoxin ABVIF [Conus abbreviatus] gb AAD48243.1 AF089988_1 (AF089988) four-loop conotoxin ABVIF [Conus abbreviatus] gb AAD48244.1 AF089989_1 (AF089989) four-loop conotoxin ABVIF [Conus abbreviatus] gb AAD48245.1 AF089990_1 (AF089990) four-loop conotoxin ABVIF [Conus abbreviatus]	3.8
2228	1705523	gi 1705523 sp P52650 C24A_PIG CYTOCHROME B-245 LIGHT CHAIN (P22 PHAGOCYTE B-CYTOCHROME) (NEUTROPHIL CYTOCHROME B, 22 KD POLYPEPTIDE) (P22-PHOX) (CYTOCHROME B(558) ALPHA CHAIN) (SUPEROXIDE-GENERATING NADPH OXIDASE LIGHT CHAIN SUBUNIT) gb AAA64635.1  (U02477) NADPH oxidase light chain subunit [Sus scrofa]	0.48
2240	730885	gi 730885 sp P07989 TIM_SALPO TYPE I RESTRICTION ENZYME STYSP1 M PROTEIN (M.STYSP1) gb AAA27143.1  (L02507) restriction-modification enzyme type I M subunit [Salmonella enterica]	4.9
2241	6753572	gi 6753572 ref NP_034126.1  cytochrome P450, 24 [Mus musculus] sp Q64441 CP24_MOUSE CYTOCHROME P450-CC24, MITOCHONDRIAL PRECURSOR (P450-CC24) (VITAMIN D(3) 24-HYDROXYLASE) (1,25-DIHYDROXYVITAMIN D(3) 24-HYDROXYLASE) (24-OHASE) pir S60033 25-hydroxyvitamin D3 24-hydroxylase precursor - mouse dbj BAA08416.1  (D49438) 25-hydroxyvitamin D3 24-hydroxylase precursor [Mus musculus] dbj BAA21843.1  (D89669) vitamin D-24-hydroxylase [Mus musculus]	9.7

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
2243	14578299	gi 14578299 gb AAF99465.1  (AY003872) PV1H14095_P [Plasmodium vivax]	3.7
2245	1916617	gi 1916617 gb AAB51194.1  (U66003) ADAM 13 [Xenopus laevis]	0.45
2249	5739073	gi 5739073 gb AAD50327.1  (AF063693) type XIII collagen [Mus musculus]	2.5
2254	3135611	gi 3135611 gb AAC29067.1  (AF062485) cellulose synthase [Arabidopsis thaliana]	3.1
2256	281689	gi 281689 pir  S27657 hypothetical protein 1 - Rhizobium meliloti gb AAA26255.1  (M94085) not homologous to known sequences as of 2/92; ORF1; putative [Sinorhizobium meliloti]	6
2257	10434352	gi 10434352 dbj BAB14232.1  (AK022759) unnamed protein product [Homo sapiens]	2E-23
2258	1504022	gi 1504022 dbj BAA13210.1  (D86974) KIAA0220 [Homo sapiens]	4E-21
2266	1871176	gi 1871176 gb AAB63536.1  (U90439) unknown protein [Arabidopsis thaliana]	7.5
2270	12846015	gi 12846015 dbj BAB26996.1  (AK010513) putative [Mus musculus]	8
2273	12860337	gi 12860337 dbj BAB31923.1  (AK019929) putative [Mus musculus]	5
2276	994736	gi 994736 gb AAA75561.1  (M18327) LacOPZ-alpha peptide from pUC9; putative [unidentified cloning vector] gb AAA75563.1  (M18328) LacOPZ-alpha peptide from pUC9; putative [Cloning vector pBGS9+] gb AAA75565.1  (M18329) LacOPZ-alpha peptide from pUC9; putative [Cloning vector pBGS9-]	0.00002
2280	11352313	gi 11352313 pir  G83376 probable trehalose synthase PA2152 [imported] - Pseudomonas aeruginosa (strain PAO1) gb AAG05540.1 AE004642_7 (AE004642) probable trehalose synthase [Pseudomonas aeruginosa]	2
2285	7486992	gi 7486992 pir  T00831 hypothetical protein T13L16.5 - Arabidopsis thaliana gb AAD20114.2  (AC006201) hypothetical protein [Arabidopsis thaliana]	1.4
2286	10173203	gi 10173203 dbj BAB04308.1  (AP001509) BH0589~unknown conserved protein in others [Bacillus halodurans]	7.3

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
2289	7497857	gi 7497857 pir T20180 hypothetical protein C53B4.4a - <i>Caenorhabditis elegans</i> emb CAA92457.1  (Z68215) contains similarity to Pfam domain: PF00130 (Phorbol esters/diacylglycerol binding domain (C1 domain)), Score=12.8, E-value=0.0015, N=1; PF00595 (PDZ domain (Also known as DHR or GLGF).), Score=34.8, E-value=6.4e-07, N=1~cDNA EST CEMSC66F come>	9.6
2291	6424831	gi 6424831 gb AAF08166.1  (AF130210) NADH dehydrogenase subunit F [ <i>Impatiens biflora</i> ]	6.1
2292	7489002	gi 7489002 pir T07021 extensin-like protein Dif10 precursor - tomato (fragment) emb CAA67813.1  (X99451) extensin-like protein Dif10 [ <i>Lycopersicon esculentum</i> ]	5.6
2294	1684828	gi 1684828 gb AAB36537.1  (U77681) tyrosine kinase receptor [ <i>Xenopus laevis</i> ]	2
2297	12859724	gi 12859724 dbj BAB31753.1  (AK019486) putative [ <i>Mus musculus</i> ]	0.0003
2301	11498284	gi 11498284 ref NP_069510.1  adenylate kinase (adk) [ <i>Archaeoglobus fulgidus</i> ] sp O29581 KAD_ARCFU ADENYLATE KINASE (ATP-AMP TRANSPHOSPHORYLASE) pir D69334 adenylate kinase (EC 2.7.4.3) - <i>Archaeoglobus fulgidus</i> gb AAB90565.1  (AE001058) adenylate kinase (adk) [ <i>Archaeoglobus fulgidus</i> ]	3E-13
2309	14725330	gi 14725330 ref XP_002254.2  mitochondrial translational initiation factor 2 precursor [ <i>Homo sapiens</i> ]	4.5
2313	79651	gi 79651 pir A30189 iron stress-induced hypothetical protein precursor - <i>Synechococcus</i> sp	2.8
2314	7500007	gi 7500007 pir T16186 hypothetical protein F27D9.4 - <i>Caenorhabditis elegans</i> gb AAA93383.1  (U49829) Hypothetical protein F27D9.4 [ <i>Caenorhabditis elegans</i> ]	7.1
2317	13517833	gi 13517833 gb AAK29011.1  (AF344620) long-wavelength rhodopsin [ <i>Ceratina calcarata</i> ]	3.4

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
2318	7478661	gi 7478661 pir F70662 probable plcC protein - Mycobacterium tuberculosis (strain H37RV) emb CAB06146.1  (Z83860) plcC [Mycobacterium tuberculosis] gb AAK46707.1  (AE007081) phospholipase C [Mycobacterium tuberculosis CDC1551]	4.4
2323	14768227	gi 14768227 ref XP_012121.3  purinergic receptor P2X, ligand-gated ion channel, 7 [Homo sapiens]	4.3
2328	283032	gi 283032 pir S22456 hydroxyproline-rich glycoprotein - perennial teosinte emb CAA45514.1  (X64173) hydroxyproline-rich glycoprotein [Zea diploperennis]	5.4
2329	10241645	gi 10241645 emb CAC09484.1  (AL442113) putative protein [Oryza sativa]	9.1
2330	14733085	gi 14733085 ref XP_003575.3  soluble liver antigen/liver pancreas antigen [Homo sapiens]	1E-17
2335	12188796	gi 12188796 emb CAC21494.1  (AJ278866) MchF protein [Escherichia coli]	4.7
2340	2492604	gi 2492604 sp P78595 CDR2_CANAL MULTIDRUG RESISTANCE PROTEIN CDR2 gb AAB96797.1  (U63812) drug resistance protein 2 [Candida albicans]	6.4
2345	13365569	gi 13365569 dbj BAB39114.1  (AP002897) hypothetical protein~similar to Oryza sativa chromosome 1, P0665D10.16	1.8
2346	1334612	gi 1334612 emb CAA41034.1  (X57968) nad1 [Triticum aestivum]	4.8
2351	1334612	gi 1334612 emb CAA41034.1  (X57968) nad1 [Triticum aestivum]	4.8
2352	1334612	gi 1334612 emb CAA41034.1  (X57968) nad1 [Triticum aestivum]	4.6
2353	1334612	gi 1334612 emb CAA41034.1  (X57968) nad1 [Triticum aestivum]	4.8
2356	1334612	gi 1334612 emb CAA41034.1  (X57968) nad1 [Triticum aestivum]	4.4
2357	14250644	gi 14250644 gb AAH08786.1 AAH08786 (BC008786) integrin, alpha 5 (fibronectin receptor, alpha polypeptide) [Homo sapiens]	2
2367	7293054	gi 7293054 gb AAF48440.1  (AE003498) Top1 gene product [Drosophila melanogaster]	1.2
2369	13959344	gi 13959344 sp P82957 DM43_DIDMA VENOM METALLOPROTEINASE INHIBITOR DM43	8.2

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
2371	9082017	gi 9082017 gb AAF82689.1 AF227196_1 (AF227196) ORF1a polypeptide [gill-associated virus]	7.8
2374	7498863	gi 7498863 pir T20730 hypothetical protein F10G8.8 - <i>Caenorhabditis elegans</i> emb CAB02286.2  (Z80216) Weak similarity with intermediate filament protein (TREMBL id G633240), contains similarity to Pfam domain: PF00169 (PH domain), Score=79.3, E-value=2.7e-21, N=2~cDNA EST EMBL:T01262 comes from this gene~cDNA EST yk23d5.3 comes from this gene~> emb CAA19441.2  (AL023823) Weak similarity with intermediate filament protein (TREMBL id G633240), contains similarity to Pfam domain: PF00169 (PH domain), Score=79.3, E-value=2.7e-21, N=2~cDNA EST EMBL:T01262 comes from this gene~cDNA EST yk23d5.3 comes from this gen>	2.5
2375	321514	gi 321514 pir S27931 Env/v-mpl fusion protein - myeloproliferative leukemia virus gb AAA77654.1  (M60350) env:v-mpl fusion protein [Myeloproliferative leukemia virus]	2.8
2376	11348760	gi 11348760 pir C83635 hypothetical protein PA0086 [imported] - <i>Pseudomonas aeruginosa</i> (strain PAO1) gb AAG03476.1 AE004447_9 (AE004447) hypothetical protein [Pseudomonas aeruginosa]	4.6
2377	742234	gi 742234 prf 2009317A adhA upstream ORF [Acetobacter (subgen. Acetobacter) aceti]	8.2
2379	11466189	gi 11466189 ref NP_066512.1  apocytochrome b [Naegleria gruberi] gb AAG17790.1 AF288092_15 (AF288092) apocytochrome b [Naegleria gruberi]	7.2
2380	8250181	gi 8250181 emb CAB93524.1  (AJ271740) D-Titin [Drosophila melanogaster]	4.2
2383	5870848	gi 5870848 gb AAB03857.2  (U31864) stearyl-CoA desaturase [Cyprinus carpio]	7.7
2387	4063751	gi 4063751 gb AAC98459.1  (AC005851) putative ABC transporter [Arabidopsis thaliana]	7.6
2389	7504822	gi 7504822 pir T33371 hypothetical protein H02F09.1 - <i>Caenorhabditis elegans</i> gb AAC64621.1  (AF077538) unknown [Caenorhabditis elegans]	3.6

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
2390	15011889	gi 15011889 ref NP_077251.1  oxysterol binding protein 2 [Mus musculus] emb CAC16404.2  (AJ278263) oxystyrol-binding protein homologue 1 [Mus musculus domesticus]	1.9
2393	450730	gi 450730 emb CAA50838.1  (X71982) ORF j18L; potential membrane spanning region; potential glycosylation site [African swine fever virus]	2.5
2398	7445990	gi 7445990 pir G72290 branched chain amino acid ABC transporter, ATP-binding protein - Thermotoga maritima (strain MSB8) gb AAD36215.1 AE001771_8 (AE001771) branched chain amino acid ABC transporter, ATP-binding protein [Thermotoga maritima]	7.4
2401	11990448	gi 11990448 dbj BAB19782.1  (AB052747) vascular cell adhesion molecule-1 6D variant lacking D7 [Bos taurus]	4.6
2402	12841678	gi 12841678 dbj BAB25308.1  (AK007856) putative [Mus musculus]	1E-39
2403	5052967	gi 5052967 gb AAD38786.1 AF151533_1 (AF151533) polyketide synthase [Nodulisporium sp. ATCC74245]	6.3
2407	8099350	gi 8099350 gb AAF72105.1 AF154847_1 (AF154847) 33 kDa Vamp-associated protein [Homo sapiens]	5.2
2410	267344	gi 267344 sp P29791 VGLF_BRSPA FUSION GLYCOPROTEIN PRECURSOR [CONTAINS: FUSION GLYCOPROTEIN F2; FUSION GLYCOPROTEIN F1] pir VGNZBA cell fusion glycoprotein precursor - bovine respiratory syncytial virus (strain A51908) gb AAA42804.1  (M82816) fusion protein F [Bovine respiratory syncytial virus]	1.4
2417	12856615	gi 12856615 dbj BAB30727.1  (AK017396) putative [Mus musculus]	8E-49
2425	11347010	gi 11347010 pir B81303 probable membrane protein Cj1013c [imported] - Campylobacter jejuni (strain NCTC 11168) emb CAB73269.1  (AL139077) putative membrane protein [Campylobacter jejuni]	0.89
2426	7499991	gi 7499991 pir T29526 hypothetical protein F27C1.7 - Caenorhabditis elegans gb AAB37654.1  (U80441) Hypothetical protein F27C1.7 [Caenorhabditis elegans]	3.1



Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
2427	2498043	gi 2498043 sp Q57568 Y104_METJA HYPOTHETICAL ATP-BINDING PROTEIN MJ0104 - pir H64312 probable DNA helicase MJ0104 - Methanococcus jannaschii gb AAB98084.1  (U67467) DNA-binding protein, probably DNA helicase [Methanococcus jannaschii]	1.5
2430	7494263	gi 7494263 pir T18488 hypothetical protein C0825c - malaria parasite (Plasmodium falciparum) emb CAB11127.1  (Z98551) putative cleavage and polyadenylation specificity factor protein [Plasmodium falciparum]	2.3
2434	493224	gi 493224 dbj BAA03434.1  (D14581) fatty-acid desaturase [Anabaena variabilis]	9.1
2438	6755468	gi 6755468 ref NP_036019.1  septin 3 [Mus musculus] sp Q9Z1S5 SEP3_MOUSE NEURONAL-SPECIFIC SEPTIN 3 gb AAD02884.1  (AF104411) neuronal- specific septin 3 [Mus musculus]	0.59
2440	9967295	gi 9967295 dbj BAB12347.1  (AB047936) hypothetical protein [Macaca fascicularis]	0.063
2447	12847975	gi 12847975 dbj BAB27780.1  (AK011690) putative [Mus musculus]	7E-65
2451	1730946	gi 1730946 sp P50833 YPPE_BACSU HYPOTHETICAL 14.5 KDA PROTEIN IN PONA- COTD INTERGENIC REGION pir B69940 hypothetical protein yppE - Bacillus subtilis gb AAB38463.1  (L47838) putative [Bacillus subtilis] emb CAB14144.1  (Z99115) yppE [Bacillus subtilis]	9.3
2452	401192	gi 401192 sp P30975 TLR2_DROME TACHYKININ- LIKE PEPTIDES RECEPTOR 99D (DTKR) pir S17783 tachykinin receptor homolog DTKR - fruit fly (Drosophila melanogaster) emb CAA44595.1  (X62711) receptor for tachykinin-like peptides [Drosophila melanogaster]	4.8
2453	14768202	gi 14768202 ref XP_018137.2  L1 cell adhesion molecule precursor [Homo sapiens]	0.11

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
2457	141028	gi 141028 sp P04540 NU5M_TRYBB NADH-UBIQUINONE OXIDOREDUCTASE CHAIN 5 pir QQUTC5 NADH dehydrogenase (ubiquinone) (EC 1.6.5.3) chain 5 - Trypanosoma brucei mitochondrion gb AAB59225.1  (M14820) NADH dehydrogenase subunit 5 [Trypanosoma brucei] emb CAB57807.1  (X01094) unidentified reading frame 10 [Trypanosoma brucei]	3.6
2461	7499039	gi 7499039 pir T20867 hypothetical protein F13H10.5 - Caenorhabditis elegans emb CAA92956.1  (Z68748) contains similarity to Pfam domain: PF01663 (Type I phosphodiesterase / nucleotide pyrophosphatase), Score=512.3, E-value=1.1e-150, N=1 [Caenorhabditis elegans] emb CAA15977.1  (AL021176) contains similarity to Pfam domain: PF01663 (Type I phosphodiesterase / nucleotide pyrophosphatase), Score=512.3, E-value=1.1e-150, N=1 [Caenorhabditis elegans]	9.7
2462	3023956	gi 3023956 sp Q00808 HET1_PODAN VEGETATIBLE INCOMPATIBILITY PROTEIN HET-E-1 pir T18521 beta transducin-like protein - Podospira anserina gb AAA85775.1  (L28125) beta transducin-like protein [Podospira anserina]	8.7
2463	14972564	gi 14972564 gb AAK75201.1  (AE007410) glutamine amidotransferase, class I [Streptococcus pneumoniae]	0.4
2470	13928966	gi 13928966 ref NP_113882.1  heat shock factor 2 [Rattus norvegicus] gb AAD51329.1 AF172640_1 (AF172640) heat shock factor 2 [Rattus norvegicus]	6E-14
2473	4521320	gi 4521320 dbj BAA11580.1  (D82816) product is unknown [Gallus gallus]	0.29
2475	7507534	gi 7507534 pir T24738 hypothetical protein T09E11.2 - Caenorhabditis elegans emb CAB03532.1  (Z81147) Similarity to zinc finger proteins, contains similarity to Pfam domain: PF00104 (Ligand-binding domain of nuclear hormone receptor), Score=14.1, E-value=0.00047, N=1; PF00105 (Zinc finger, C4 type (two domains)), Score=42.6, E-value=5.5e-12, N>	6.7

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
2478	927030	gi 927030 gb AAA73871.1  (L13287) kcrB4 gene product [Escherichia coli]	3.5
2481	6724309	gi 6724309 gb AAF26929.1  (AF079967) NADH dehydrogenase subunit 4 [Phytomonas serpens]	7.9
2482	6319700	gi 6319700 ref NP_009783.1  Ybr224wp [Saccharomyces cerevisiae] sp P38320 YB74_YEAST HYPOTHETICAL 19.3 KDA PROTEIN IN FAT2-MCX1 INTERGENIC REGION PRECURSOR pir S46100 probable membrane protein YBR224w - yeast (Saccharomyces cerevisiae) emb CAA85187.1  (Z36092) ORF YBR224w [Saccharomyces cerevisiae]	2.4
2496	7503173	gi 7503173 pir T31884 hypothetical protein F41E6.14 - Caenorhabditis elegans gb AAB65962.1  (AF016448) weak similarity to several acyltransferases [Caenorhabditis elegans]	9.7
2498	11352621	gi 11352621 pir E83187 tetrahydrodipicolinate succinylase PA3666 [imported] - Pseudomonas aeruginosa (strain PAO1) dbj BAA75911.1  (AB024601) tetrahydrodipicolinate N-succinyletransferase [Pseudomonas aeruginosa] gb AAG07054.1 AE004786_6 (AE004786) tetrahydrodipicolinate succinylase [Pseudomonas aeruginosa]	3.3
2500	7662214	gi 7662214 ref NP_055604.1  KIAA0628 gene product [Homo sapiens] ref XP_005044.3  KIAA0628 gene product [Homo sapiens] dbj BAA31603.1  (AB014528) KIAA0628 protein [Homo sapiens]	3
2506	7508531	gi 7508531 pir T25325 hypothetical protein T26H2.7 - Caenorhabditis elegans emb CAB04848.1  (Z82055) contains similarity to Pfam domain: PF01757 (Domain of unknown function), Score=543.5, E-value=4.6e-160, N=1 [Caenorhabditis elegans]	9.2
2507	14730527	gi 14730527 ref XP_051896.1  phospholipase A2, group IVA (cytosolic, calcium-dependent) [Homo sapiens] ref XP_051897.1  phospholipase A2, group IVA (cytosolic, calcium-dependent) [Homo sapiens]	5E-26

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
2510	138394	gi 138394 sp P27330 VHEL_LSV PROBABLE HELICASE (ORF 2) emb CAA33398.1  (X15343) 25kD protein [Lily symptomless virus]	10
2519	13938116	gi 13938116 gb AAH07173.1 AAH07173 (BC007173) Unknown (protein for IMAGE:3493127) [Mus musculus]	8E-22
2520	7486371	gi 7486371 pir T00661 hypothetical protein F3I6.24 - Arabidopsis thaliana gb AAC00591.1  (AC002396) Unknown protein [Arabidopsis thaliana]	0.16
2523	11358141	gi 11358141 pir T48198 hypothetical protein T20L15.40 - Arabidopsis thaliana emb CAB82747.1  (AL162351) putative protein [Arabidopsis thaliana]	9.1
2526	14485227	gi 14485227 gb AAK62977.1 AF384372_3 (AF384372) surface antigen [Hepatitis B virus]	2.6
2527	6594617	gi 6594617 gb AAF18559.1 U42380_1 (U42380) aminopeptidase [Aplysia californica]	5.3
2529	14193306	gi 14193306 gb AAK55890.1 AF267211_2 (AF267211) ATP synthase gamma subunit [Candidatus Carsonella ruddii]	3.5
2531	3319680	gi 3319680 emb CAA76809.1  (Y17614) N8 protein [Medicago truncatula]	1.5
2536	13811987	gi 13811987 ref NP_113116.1  DNA repair helicase component of transcription factor b [Guillardia theta] gb AAK39689.1 AF083031_46 (AF083031) DNA repair helicase component of transcription factor b [Guillardia theta]	4.8
2537	3122601	gi 3122601 sp P93107 PF20_CHLRE FLAGELLAR WD-REPEAT PROTEIN PF20 pir T08180 PF20 protein, microtubule-associated - Chlamydomonas reinhardtii gb AAB41727.1  (U78547) PF20 [Chlamydomonas reinhardtii]	1.1
2540	7460001	gi 7460001 pir G71079 hypothetical protein PH0903 - Pyrococcus horikoshii dbj BAA29997.1  (AP000004) 141aa long hypothetical protein [Pyrococcus horikoshii]	6.3
2541	12330702	gi 12330702 gb AAG52889.1 AF333769_1 (AF333769) cell recognition molecule CASPR3 [Homo sapiens]	2E-28

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
2547	6754652	gi 6754652 ref NP_034904.1  methyl-CpG binding domain protein 4 [Mus musculus] gb AAC68878.1  (AF072249) methyl-CpG binding protein MBD4 [Mus musculus] gb AAD56595.1 AF120996_1 (AF120996) methyl-CpG binding protein 4 [Mus musculus domesticus]	7.1
2548	12655370	gi 12655370 emb CAB57344.3  (AJ243708) prickly pk isoform [Drosophila melanogaster]	7.7
2551	12853631	gi 12853631 dbj BAB29800.1  (AK015333) putative [Mus musculus]	0.61
2554	11466216	gi 11466216 ref NP_066539.1  haem lyase [Naegleria gruberi] gb AAG17817.1 AF288092_42 (AF288092) haem lyase [Naegleria gruberi]	1.5
2557	7321597	gi 7321597 gb AAA32099.2  (L28677) unknown [Tetrahymena pyriformis]	3
2560	7304202	gi 7304202 gb AAF59238.1  (AE003840) CG1602 gene product [Drosophila melanogaster]	1.6
2564	336831	gi 336831 gb AAB02281.1  (M57910) NADH dehydrogenase subunit 2 [Drosophila melanogaster]	5.5
2566	7515231	gi 7515231 pir T13518 hypothetical protein 29 - Bacillus phage phi-105 dbj BAA36635.1  (AB016282) ORF29 [bacteriophage phi-105]	7.7
2568	12847263	gi 12847263 dbj BAB27500.1  (AK011258) putative [Mus musculus]	6.6
2569	9964395	gi 9964395 ref NP_064863.1  AMV081 [Amsacta moorei entomopoxvirus] gb AAG02787.1 AF250284_81 (AF250284) AMV081 [Amsacta moorei entomopoxvirus]	2.4
2573	12060849	gi 12060849 gb AAG48266.1 AF308299_1 (AF308299) serologically defined breast cancer antigen NY-BR-85 [Homo sapiens]	0.0006
2575	9633381	gi 9633381 ref NP_050485.1  D5L protein [variola minor virus] pir H72173 D5L protein - variola minor virus (strain Garcia-1966) gb AAA69395.1  (U18339) D4L [Variola virus] emb CAA50966.1  (X72086) ORF15L; B16L in citation [3] [Variola virus] emb CAB54786.1  (Y16780) D5L protein [variola minor virus]	7.5
2576	7407131	gi 7407131 gb AAF61923.1  (AF228524) SanE [Streptomyces ansochromogenes]	0.53
2577	14760789	gi 14760789 ref XP_044332.1  piwi (Drosophila)-like 1 [Homo sapiens]	9E-42

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
2584	2764800	gi 2764800 emb CAA54153.1  (X76738) 12s globulin [Avena sativa]	1.4
2585	12860337	gi 12860337 dbj BAB31923.1  (AK019929) putative [Mus musculus]	5.3
2586	7768484	gi 7768484 emb CAB90775.1  (AL355632) putative mitochondrial carrier protein [Schizosaccharomyces pombe]	2.8
2587	12620098	gi 12620098 gb AAG60558.1  (AF250768) BioA-like protein [uncultured bacterium pCosFS1]	8.4
2591	2281181	gi 2281181 gb AAB66275.1  (U58587) maturase [Lagoecia cuminoides]	3.8
2595	6573736	gi 6573736 gb AAF17656.1 AC009398_5 (AC009398) F20B24.10 [Arabidopsis thaliana]	6.7
2596	31155	gi 31155 emb CAA24999.1  (X00176) preproenkephalin part 1 [Homo sapiens]	9.5
2600	11278033	gi 11278033 pir C81832 transferrin-binding protein A NMA2024 [imported] - Neisseria meningitidis (group A strain Z2491) gb AAC13726.1  (AF058689) transferrin binding protein A precursor [Neisseria meningitidis] emb CAB85243.1  (AL162757) transferrin-binding protein A [Neisseria meningitidis Z2491]	5
2613	7493138	gi 7493138 pir T37964 probable ubiquitin ligase - fission yeast (Schizosaccharomyces pombe) emb CAB16714.1  (Z99531) putative ubiquitin ligase [Schizosaccharomyces pombe]	0.21
2615	14625275	gi 14625275 gb AAA80360.2  (U39644) Hypothetical protein T10E10.4 [Caenorhabditis elegans]	5.3
2617	7515479	gi 7515479 pir S72298 hypothetical protein 91 - Plasmodium falciparum plastid emb CAA64588.1  (X95276) ORF91 [Plasmodium falciparum]	0.66
2619	14091855	gi 14091855 gb AAK53858.1 AC016781_12 (AC016781) Hypothetical protein [Oryza sativa]	0.69
2621	8393165	gi 8393165 ref NP_035661.2  transiently-expressed axonal glycoprotein [Mus musculus]	0.11
2624	6754242	gi 6754242 ref NP_034603.1  histidine rich calcium binding protein [Mus musculus] gb AAD55250.1 AF158597_1 (AF158597) histidine-rich Ca <sup>2+</sup> binding protein [Mus musculus]	8.1
2625	7959261	gi 7959261 dbj BAA96024.1  (AB040933) KIAA1500 protein [Homo sapiens]	1E-36

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
2626	5508828	gi 5508828 gb AAD43995.1  (U59485) AttU [Agrobacterium tumefaciens]	0.27
2627	3643603	gi 3643603 gb AAC42250.1  (AC005395) unknown protein [Arabidopsis thaliana]	4.7
2630	5453906	gi 5453906 ref NP_006310.1  CDP-diacylglycerol--inositol 3-phosphatidyltransferase (phosphatidylinositol synthase) [Homo sapiens] ref XP_008065.1  CDP-diacylglycerol--inositol 3-phosphatidyltransferase (phosphatidylinositol synthase) [Homo sapiens] ref XP_043951.1  CDP-diacylglycerol--inositol 3-phosphatidyltransferase (phosphatidylinositol synthase) [Homo sapiens] sp O14735 PIS_HUMAN CDP-DIACYLGLYCEROL--INOSITOL 3-PHOSPHATIDYLTRANSFERASE (PHOSPHATIDYLINOSITOL SYNTHASE) (PTDINS SYNTHASE) (PI SYNTHASE) gb AAB94860.1  (AF014807) phosphatidylinositol synthase [Homo sapiens] gb AAH01444.1 AAH01444 (BC001444) CDP-diacylglycerol--inositol 3-phosphatidyltransferase (phosphatidylinositol synthase) [Homo sapiens]	7
2631	7515479	gi 7515479 pir  S72298 hypothetical protein 91 - Plasmodium falciparum plastid emb CAA64588.1  (X95276) ORF91 [Plasmodium falciparum]	0.71
2636	11467075	gi 11467075 ref NP_042551.1  ribosomal protein L5 [Acanthamoeba castellanii] sp P46764 RM05_ACACA MITOCHONDRIAL 60S RIBOSOMAL PROTEIN L5 pir  S53852 ribosomal protein L5 - Acanthamoeba castellanii mitochondrion gb AAD11844.1  (U12386) ribosomal protein L5 [Acanthamoeba castellanii]	2.3
2639	1352549	gi 1352549 sp P48906 NU2M_HANWI NADH-UBIQUINONE OXIDOREDUCTASE CHAIN 2	4.1
2642	13111580	gi 13111580 gb AAK12385.1 AF296091_1 (AF296091) polypeptide [Porcine teschovirus]	2.4
2646	1314734	gi 1314734 gb AAA99804.1  (U54641) 220 kDa silk protein [Chironomus thummi]	1.9
2651	7001374	gi 7001374 gb AAF34871.1 AF112184_1 (AF112184) serine/threonine kinase NKIATRE alpha [Rattus norvegicus]	2.9
2653	2687582	gi 2687582 gb AAB88853.1  (AF032875) protein kinase [Mus musculus]	7.2

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
2654	10636263	gi 10636263 emb CAC10528.1  (AJ293919) putative inositol 1,4,5-trisphosphate receptor [ <i>Caenorhabditis briggsae</i> ]	5
2663	5902891	gi 5902891 dbj BAA84474.1  (AB032367) type I polyketide synthase AVES 1 [ <i>Streptomyces avermitilis</i> ]	0.087
2664	4567214	gi 4567214 gb AAD23629.1 AC007113_2 (AC007113) putative villin [ <i>Arabidopsis thaliana</i> ]	6.4
2665	2326816	gi 2326816 emb CAA99382.1  (Z75081) ORF YOR172w [ <i>Saccharomyces cerevisiae</i> ]	0.46
2667	14285987	gi 14285987 sp O83933 Y967_TREPA HYPOTHETICAL PROTEIN TP0967 pir B71260 hypothetical protein TP0967 - syphilis spirochete gb AAC65925.1  (AE001264) <i>T. pallidum</i> predicted coding region TP0967 [ <i>Treponema pallidum</i> ]	6.9
2669	6678247	gi 6678247 ref NP_033358.1  transcription factor 7-like 1 [ <i>Mus musculus</i> ] emb CAA11070.1  (AJ223069) TCF-3 protein [ <i>Mus musculus</i> ]	3.4
2671	7491697	gi 7491697 pir T40527 hypothetical protein SPBC530.11c - fission yeast ( <i>Schizosaccharomyces pombe</i> ) emb CAA19177.1  (AL023634) putative transcriptional regulator [ <i>Schizosaccharomyces pombe</i> ]	4.9
2673	5459308	gi 5459308 emb CAB50693.1  (AJ238951) CE9 protein [ <i>Canis familiaris</i> ]	8.8
2675	7959261	gi 7959261 dbj BAA96024.1  (AB040933) KIAA1500 protein [ <i>Homo sapiens</i> ]	1E-36
2680	14520279	gi 14520279 ref NP_125754.1  hypothetical protein [ <i>Pyrococcus abyssi</i> ] pir B75192 hypothetical protein PAB2304 - <i>Pyrococcus abyssi</i> (strain Orsay) emb CAB48985.1  (AJ248283) hypothetical protein [ <i>Pyrococcus abyssi</i> ]	6.7
2681	12654531	gi 12654531 gb AAH01098.1 AAH01098 (BC001098) Unknown (protein for IMAGE:3508043) [ <i>Homo sapiens</i> ]	2.8
2682	12657687	gi 12657687 gb AAK01000.1  (AF178873) NADH dehydrogenase subunit 1 [ <i>Archaeobacter parthenias</i> ]	0.68



Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
2686	6319517	gi 6319517 ref NP_009599.1  Ybr043cp [Saccharomyces cerevisiae] sp P38227 YBP3_YEAST HYPOTHETICAL 77.3 KDA PROTEIN IN FAT1- TCM62 INTERGENIC REGION pir S45901 probable membrane protein YBR043c - yeast (Saccharomyces cerevisiae) emb CAA84985.1  (Z35912) ORF YBR043c [Saccharomyces cerevisiae]	7.2
2691	7019565	gi 7019565 ref NP_037528.1  ubiquitin specific protease 25; ubiquitin specific protease USP25 [Homo sapiens] ref XP_047738.1  ubiquitin specific protease 25 [Homo sapiens] gb AAF24998.1 AF134213_1 (AF134213) ubiquitin-specific protease [Homo sapiens]	2E-20
2693	2130214	gi 2130214 pir S67381 tubulin-folding cofactor D homolog - fission yeast (Schizosaccharomyces pombe) pir T39319 tubulin-folding cofactor D homolog - fission yeast (Schizosaccharomyces pombe) emb CAA20686.1  (AL031528) tubulin-folding cofactor d. [Schizosaccharomyces pombe]	3.9
2696	2120601	gi 2120601 pir JC6030 3-oxo-5alpha-steroid 4- dehydrogenase (EC 1.3.99.5) - Comamonas testosteroni gb AAB08517.1  (L23428) delta 4, 5-alpha steroid dehydrogenase [Comamonas testosteroni]	4.6
2697	4263524	gi 4263524 gb AAD15350.1  (AC004044) hypothetical protein [Arabidopsis thaliana] emb CAB77761.1  (AL161495) hypothetical protein [Arabidopsis thaliana]	5.8
2698	5453072	gi 5453072 gb AAD43426.1  (AF073977) olfactory receptor [Mus musculus domesticus]	1.1
2701	7298915	gi 7298915 gb AAF54120.1  (AE003675) CG10267 gene product [Drosophila melanogaster]	0.86
2703	158148	gi 158148 gb AAA28827.1  (M19537) RNA polymerase II largest subunit (, EC 2.7.7.6) [Drosophila melanogaster]	0.95
2706	7492334	gi 7492334 pir T37965 probable 40s ribosomal protein - fission yeast (Schizosaccharomyces pombe) emb CAB16715.1  (Z99531) putative component of U3 snoRNP, required for pre-18S rRNA processing [Schizosaccharomyces pombe]	6.8

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
2709	9366627	gi 9366627 emb CAB95389.1  (AL359782) conserved hypothetical protein, CHR1.84 [Trypanosoma brucei]	9.2
2713	7436828	gi 7436828 pir T00129 hypothetical protein 7 - Leptospira interrogans (fragment) dbj BAA24376.1  (AB010203) ORF7; putative [Leptospira interrogans]	7.2
2715	3805770	gi 3805770 gb AAC69148.1  (U78721) auxin response transcription factor 3 (ETTIN/ARF3) [Arabidopsis thaliana] gb AAG53998.1 AF336917_1 (AF336917) ARF3 [Arabidopsis thaliana] gb AAK26023.1 AF360313_1 (AF360313) ARF3 [Arabidopsis thaliana]	0.65
2716	5454158	gi 5454158 ref NP_006286.1  valyl-tRNA synthetase 2 [Homo sapiens] sp P26640 SYV2_HUMAN VALYL-TRNA SYNTHETASE 2 (VALINE--TRNA LIGASE 2) (VALRS 2) gb AAD21819.1  (AF134726) G7A [Homo sapiens]	1.6
2721	7019565	gi 7019565 ref NP_037528.1  ubiquitin specific protease 25; ubiquitin specific protease USP25 [Homo sapiens] ref XP_047738.1  ubiquitin specific protease 25 [Homo sapiens] gb AAF24998.1 AF134213_1 (AF134213) ubiquitin-specific protease [Homo sapiens]	8E-21
2722	13186335	gi 13186335 gb AAK15378.1  (AF211133) tryptophanyl-tRNA synthetase [Carsonella ruddii]	8.9
2726	7514607	gi 7514607 pir A71301 conserved hypothetical protein TP0636 - syphilis spirochete gb AAC65610.1  (AE001238) conserved hypothetical protein [Treponema pallidum]	9.4
2727	13129046	gi 13129046 ref NP_076972.1  hypothetical protein MGC2718 [Homo sapiens] ref XP_017742.2  hypothetical protein MGC2718 [Homo sapiens] ref XP_043040.1  hypothetical protein MGC2718 [Homo sapiens] gb AAH01076.1 AAH01076 (BC001076) Unknown (protein for MGC:2718) [Homo sapiens] gb AAH05121.1 AAH05121 (BC005121) hypothetical protein MGC2718 [Homo sapiens]	3.2

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
2730	11466216	gi 11466216 ref NP_066539.1  haem lyase [Naegleria gruberi] gb AAG17817.1 AF288092_42 (AF288092) haem lyase [Naegleria gruberi]	1.4
2734	14701844	gi 14701844 gb AAK72251.1  (AF378136) MB2 [Plasmodium falciparum]	3.3
2739	7486489	gi 7486489 pir T00671 hypothetical protein F6E13.4 - Arabidopsis thaliana gb AAC23400.1  (AC004005) putative methyl chloride transferase [Arabidopsis thaliana] gb AAK73255.1  (AY044314) putative methyl chloride transferase [Arabidopsis thaliana]	8.1
2747	7509946	gi 7509946 pir T26972 hypothetical protein Y47H9C.4 - Caenorhabditis elegans emb CAA21739.1  (AL032657) contains similarity to Pfam domain: PF00008 (EGF-like domain), Score=76.2, E-value=2.2e-19, N=17~cDNA EST yk20a5.3 comes from this gene~cDNA EST yk20a5.5 comes from this gene~cDNA EST yk299a12.3 comes from this gene~cDNA EST yk467g8.3 comes > gb AAG60061.1 AF332568_1 (AF332568) CED-1 [Caenorhabditis elegans]	1.6
2749	8569100	gi 8569100 gb AAF76445.1 AC015445_12 (AC015445) Contains Ribosomal S17 PF 00366 and DLH PF 01738 domains. [Arabidopsis thaliana]	9.5
2750	7293625	gi 7293625 gb AAF48997.1  (AE003512) CG14223 gene product [Drosophila melanogaster]	2.9
2751	5454050	gi 5454050 ref NP_006369.1  sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 4D; sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, 4D [Homo sapiens] sp Q92854 SM4D_HUMAN SEMAPHORIN 4D PRECURSOR (LEUKOCYTE ACTIVATION ANTIGEN CD100) (BB18) (A8) (GR3) gb AAC50810.1  (U60800) semaphorin [Homo sapiens]	9
2761	9964076	gi 9964076 gb AAG09812.1 AF275943_1 (AF275943) avermectin polyketide synthase [Streptomyces avermitilis]	2.9
2762	4234794	gi 4234794 gb AAD12962.1  (AF078135) unknown [Leptospira borgpetersenii]	1.3

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
2764	11131078	gi 11131078 sp O15072 ATS3_HUMAN ADAM-TS 3 PRECURSOR (A DISINTEGRIN AND METALLOPROTEINASE WITH THROMBOSPONDIN MOTIFS 3) (ADAMTS-3) (ADAM-TS3) dbj BAA20821.1  (AB002364) KIAA0366 [Homo sapiens]	4E-17
2765	6449069	gi 6449069 gb AAF08806.1 AF192748_1 (AF192748) synapsin Ib [Lampetra fluviatilis]	0.008
2769	7300358	gi 7300358 gb AAF55517.1  (AE003721) CG8045 gene product [alt 2] [Drosophila melanogaster] gb AAB34837.2  (S78747) RK2 [Drosophila sp.]	3
2772	14731064	gi 14731064 ref XP_036165.1  40679 [Homo sapiens]	6E-20
2774	4927134	gi 4927134 gb AAD33018.1 AF131999_1 (AF131999) putative erythrocyte binding protein EBL-1 [Plasmodium falciparum]	8.6
2775	11994465	gi 11994465 dbj BAB02467.1  (AB025624) contains similarity to late embryogenesis abundant protein~gene_id:MLD14.16 [Arabidopsis thaliana]	7.5
2776	12852706	gi 12852706 dbj BAB29508.1  (AK014697) putative [Mus musculus]	1
2777	9972373	gi 9972373 gb AAG10623.1 AC022521_1 (AC022521) Unknown protein [Arabidopsis thaliana]	3.2
2779	12838769	gi 12838769 dbj BAB24323.1  (AK005931) putative [Mus musculus]	7.6
2780	14743085	gi 14743085 ref XP_050026.1  similar to immunoglobulin superfamily containing leucine-rich repeat (H. sapiens) [Homo sapiens]	3.4
2781	4581140	gi 4581140 gb AAD24624.1 AC006919_4 (AC006919) unknown protein [Arabidopsis thaliana]	2.8
2792	7661684	gi 7661684 ref NP_056277.1  DKFZP586L0724 protein [Homo sapiens] ref XP_038194.1  DKFZP586L0724 protein [Homo sapiens] ref XP_038195.1  19734 [Homo sapiens] pir T14789 hypothetical protein DKFZp586L0724.1 - human emb CAB53709.1  (AL110271) hypothetical protein [Homo sapiens] gb AAH01726.1 AAH01726 (BC001726) Similar to DKFZP586L0724 protein [Homo sapiens]	7
2793	13624635	gi 13624635 emb CAA10856.2  (AJ222584) maturase-like protein [Euglena viridis]	1.3

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
2800	9622888	gi 9622888 gb AAF89968.1 AF200532_1 (AF200532) cellulose synthase-8 [Zea mays]	3.8
2803	7499161	gi 7499161 pir T25690 hypothetical protein F15A8.6 - Caenorhabditis elegans gb AAB52848.1  (U97549) strong similarity to the type-B carboxylesterase/lipase family [Caenorhabditis elegans]	3.1
2806	14746401	gi 14746401 ref XP_031955.1  ring finger protein 27 [Homo sapiens]	0.3
2809	14731173	gi 14731173 ref XP_017730.2  IQ motif containing GTPase activating protein 2 [Homo sapiens]	2E-11
2813	4567214	gi 4567214 gb AAD23629.1 AC007113_2 (AC007113) putative villin [Arabidopsis thaliana]	3.5
2817	2500866	gi 2500866 sp Q20411 SA11_CAEEL SRA-11 PROTEIN pir T22192 hypothetical protein F44F4.13 - Caenorhabditis elegans emb CAA85461.1  (Z37092) contains similarity to Pfam domain: PF02117 (C.elegans Sra family integral membrane protein), Score=675.6, E-value=8.3e-200, N=1 [Caenorhabditis elegans]	3.1
2818	15011503	gi 15011503 gb AAK77598.1 AF396436_38 (AF396436) ymf71 [Tetrahymena thermophila]	5.9
2823	11278033	gi 11278033 pir C81832 transferrin-binding protein A NMA2024 [imported] - Neisseria meningitidis (group A strain Z2491) gb AAC13726.1  (AF058689) transferrin binding protein A precursor [Neisseria meningitidis] emb CAB85243.1  (AL162757) transferrin-binding protein A [Neisseria meningitidis Z2491]	5
2825	3913143	gi 3913143 sp O23913 AX1B_ARATH ALTERNATIVE OXIDASE 1B PRECURSOR dbj BAA22624.1  (D89875) alternative oxidase [Arabidopsis thaliana] dbj BAB01774.1  (AB022215) alternative oxidase 1b precursor [Arabidopsis thaliana]	1.2
2827	12842679	gi 12842679 dbj BAB25689.1  (AK008476) putative [Mus musculus]	7.8
2835	12848636	gi 12848636 dbj BAB28031.1  (AK012100) putative [Mus musculus]	0.083
2839	7292152	gi 7292152 gb AAF47564.1  (AE003472) Dhc62B gene product [Drosophila melanogaster]	4.6

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
2846	9628099	gi 9628099 ref NP_042686.1  alternative tat protein [Jembrana disease virus] gb AAA64395.1  (U21603) alternative tat protein [Jembrana disease virus] prf 2116345E tat gene [Jembrana disease virus]	3.3
2855	4165313	gi 4165313 dbj BAA37146.1  (AB022083) SOX30 protein [Homo sapiens]	9.2
2859	14388365	gi 14388365 dbj BAB60739.1  (AB062957) hypothetical protein [Macaca fascicularis]	0.55
2864	14739019	gi 14739019 ref XP_005626.3  deleted in bladder cancer chromosome region candidate 1 [Homo sapiens]	6.3
2867	6319950	gi 6319950 ref NP_010031.1  Transcription regulator; Ycr106wp [Saccharomyces cerevisiae] sp P25611 YCZ6_YEAST PUTATIVE 95.7 KD TRANSCRIPTIONAL REGULATORY PROTEIN IN PAU3-AAD3 INTERGENIC REGION pir S19418 probable membrane protein YCR106w - yeast (Saccharomyces cerevisiae) emb CAA42238.1  (X59720) hypothetical protein [Saccharomyces cerevisiae]	9.1
2870	14724850	gi 14724850 ref XP_050192.1  29140 [Homo sapiens]	2.2
2871	4587097	gi 4587097 dbj BAA76616.1  (AB019045) OMPdecarboxylase [Rhizomucor pusillus]	9.7
2873	7522108	gi 7522108 pir T29097 pro-pol-dUTPase polypeptide - murine endogenous retrovirus ERV-L (fragment) emb CAA73251.1  (Y12713) protease; reverse transcriptase; RNaseH; integrase; dUTPase; Pro-Pol-dUTPase polypeptide [Mus musculus]	0.003
2875	7482073	gi 7482073 pir B69010 conserved hypothetical protein MTH1078 - Methanobacterium thermoautotrophicum (strain Delta H) gb AAB85567.1  (AE000879) conserved protein [Methanothermobacter thermoautotrophicus]	4.6
2876	11360401	gi 11360401 pir T42759 Munc13-3 protein - rat	0.000000005
2879	5091521	gi 5091521 dbj BAA78756.1  (AB023482) Hypothetical protein [Oryza sativa]	2.1
2881	13810543	gi 13810543 dbj BAB43950.1  (AB051633) ookinete surface protein Pos28-2 [Plasmodium ovale]	3
2882	5091521	gi 5091521 dbj BAA78756.1  (AB023482) Hypothetical protein [Oryza sativa]	2.1

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
2887	6723244	gi 6723244 dbj BAA89640.1  (AB036666) similar to terminase large subunit of phage lambda [Wolbachia sp. wKue]	7.1
2889	7494347	gi 7494347 pir E71625 variant-specific surface protein 1 truncated homolog PFB0020c - malaria parasite (Plasmodium falciparum) gb AAC71794.1  (AE001366) PfEMP1 fragment [Plasmodium falciparum]	5
2890	6942188	gi 6942188 gb AAF32349.1 AF220008_1 (AF220008) coilin p80 [Danio rerio]	0.11
2891	10639397	gi 10639397 emb CAC11399.1  (AL445063) hypothetical membrane protein [Thermoplasma acidophilum]	8.5
2898	10800417	gi 10800417 ref NP_006759.2  BRCA1 associated protein [Homo sapiens]	0.98
2901	7488089	gi 7488089 pir T02283 probable disease resistance protein T13D8.20 - Arabidopsis thaliana gb AAC24071.1  (AC004473) Contains similarity to TMV resistance protein N homolog gb 2245048 from A. thaliana chromosome 4 contig gb Z97342. [Arabidopsis thaliana]	8.5
2904	10728394	gi 10728394 gb AAF45654.2  (AE003421) EG:171E4.2 gene product [Drosophila melanogaster]	1.4
2905	10956333	gi 10956333 ref NP_052782.1  pXO1-86 [Bacillus anthracis] pir F59101 hypothetical protein pXO1-86 - Bacillus anthracis virulence plasmid pXO1 gb AAD32390.1 AAD32390 (AF065404) pXO1-86 [Bacillus anthracis]	9.7
2906	4028153	gi 4028153 gb AAC96117.1  (AF083221) putative neurotransmitter receptor [Takifugu rubripes]	2.8
2909	12836120	gi 12836120 dbj BAB23511.1  (AK004729) putative [Mus musculus]	5.3
2911	1778844	gi 1778844 gb AAB40929.1  (U83086) LimA [Dictyostelium discoideum]	1.3
2913	3192956	gi 3192956 gb AAC41298.1  (AF033670) T-Box protein 4 [Gallus gallus]	3.1
2914	7506147	gi 7506147 pir T33303 hypothetical protein R01B10.4 - Caenorhabditis elegans gb AAC17768.1  (AF068718) R01B10.4 gene product [Caenorhabditis elegans]	0.4

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
2915	6041793	gi 6041793 gb AAF02113.1 AC009755_6 (AC009755) putative auxin-independent growth promoter [Arabidopsis thaliana]	2.1
2916	5803098	gi 5803098 ref NP_006757.1  zinc finger protein 220; Monocytic leukemia zinc finger protein [Homo sapiens] sp Q92794 MOZ_HUMAN MONOCYTIC LEUKEMIA ZINC FINGER PROTEIN (ZINC FINGER PROTEIN 220) gb AAC50662.1  (U47742) monocytic leukaemia zinc finger protein [Homo sapiens]	0.084
2919	10639353	gi 10639353 emb CAC11355.1  (AL445063) hypothetical membrane protein [Thermoplasma acidophilum]	3.1
2920	13235586	gi 13235586 emb CAC33776.1  (AJ301807) SclB protein [Streptococcus pyogenes]	9.7
2925	7507618	gi 7507618 pir T33548 hypothetical protein T10D4.8 - Caenorhabditis elegans	4.3
2928	7522108	gi 7522108 pir T29097 pro-pol-dUTPase polypeptide - murine endogenous retrovirus ERV-L (fragment) emb CAA73251.1  (Y12713) protease; reverse transcriptase; RNaseH; integrase; dUTPase; Pro-Pol- dUTPase polypeptide [Mus musculus]	1.2
2932	13542796	gi 13542796 gb AAH05601.1 AAH05601 (BC005601) Similar to RIKEN cDNA 1110061A19 gene [Mus musculus]	6.4
2934	417869	gi 417869 sp P33007 TERP_PSESP TERPREDOXIN (TDX) pir E42971 terpredoxin - Pseudomonas sp gb AAA25998.1  (M91440) terpredoxin [Pseudomonas sp.]	3.7
2938	7433891	gi 7433891 pir T00981 flavonol 3-O-glucosyltransferase homolog T9J22.15 - Arabidopsis thaliana gb AAC14497.1  (AC002505) putative glucosyltransferase [Arabidopsis thaliana]	6.8
2939	15021546	gi 15021546 gb AAK77823.1 AF369029_154 (AF369029) ORF154 [white spot syndrome virus]	0.25
2944	11466694	gi 11466694 ref NP_039290.1  ORF370i [Marchantia polymorpha] sp P12174 MATK_MARPO PROBABLE INTRON MATURASE pir A05034 hypothetical protein 370i - liverwort (Marchantia polymorpha) chloroplast emb CAA28076.1  (X04465) ORF370i [Marchantia polymorpha]	4.3



Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
2945	7302236	gi 7302236 gb AAF57330.1  (AE003786) CG10416 gene product [ <i>Drosophila melanogaster</i> ]	1.4
2950	2495638	gi 2495638 sp P76511 YFDO_ECOLI HYPOTHETICAL 14.4 KDA PROTEIN IN INTC-DSDC INTERGENIC REGION pir C65009 hypothetical protein b2358 - <i>Escherichia coli</i> (strain K-12) gb AAC75417.1  (AE000324) orf, hypothetical protein [ <i>Escherichia coli</i> K12]	4.5
2955	220578	gi 220578 dbj BAA00447.1  (D00570) open reading frame (251 AA) [ <i>Mus musculus</i> ]	4.2
2958	12855573	gi 12855573 dbj BAB30384.1  (AK016695) putative [ <i>Mus musculus</i> ]	0.007
2963	2981631	gi 2981631 dbj BAA25253.1  (AB012223) ORF2 [ <i>Canis familiaris</i> ]	0.29
2966	7657401	gi 7657401 ref NP_056616.1  neuropathy target esterase; Swiss cheese [ <i>Mus musculus</i> ] gb AAD51700.1 AF173829_1 (AF173829) neuropathy target esterase homolog [ <i>Mus musculus</i> ]	1.5
2967	14285535	gi 14285535 sp P71399 LSG1_HAEIN LSG LOCUS PUTATIVE PROTEIN 1	4.8
2973	14423780	gi 14423780 sp O95013 O4F3_HUMAN OLFACTORY RECEPTOR 4F3 gb AAD05195.1  (AC004908) similar to rat olfactory receptor OR18; similar to S29710 (PID:g423702) [ <i>Homo sapiens</i> ]	3E-35
2975	14771691	gi 14771691 ref XP_045484.1  67354 [ <i>Homo sapiens</i> ]	1.3
2978	6573738	gi 6573738 gb AAF17658.1 AC009398_7 (AC009398) F20B24.13 [ <i>Arabidopsis thaliana</i> ]	8.5
2982	13811437	gi 13811437 gb AAK40121.1  (AF354707) type II deodinase [ <i>Xenopus laevis</i> ]	2.4
2986	7522108	gi 7522108 pir T29097 pro-pol-dUTPase polypeptide - murine endogenous retrovirus ERV-L (fragment) emb CAA73251.1  (Y12713) protease; reverse transcriptase; RNaseH; integrase; dUTPase; Pro-Pol-dUTPase polypeptide [ <i>Mus musculus</i> ]	0.00001
2990	12722927	gi 12722927 gb AAK04181.1 AE006247_3 (AE006247) UNKNOWN PROTEIN [ <i>Lactococcus lactis</i> subsp. <i>lactis</i> ]	1.3

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
2994	11346713	gi 11346713 pir F81302 hypothetical protein Cj1009c [imported] - Campylobacter jejuni (strain NCTC 11168) emb CAB73265.1  (AL139077) hypothetical protein Cj1009c [Campylobacter jejuni]	4.1
2995	7321945	gi 7321945 gb AAC60504.2  (S68356) action potential broadening potassium channel [Aplysia sp.]	4.2
3003	11360394	gi 11360394 pir T42731 atrophin-1 related protein - rat gb AAA98970.1  (U44091) atrophin-1 related protein [Rattus norvegicus]	7.6
3005	10765337	gi 10765337 gb AAG22997.1  (AF188579) glycoprotein [Bovine respiratory syncytial virus]	1.9
3006	5803252	gi 5803252 dbj BAA83562.1  (AP000399) hypothetical protein [Oryza sativa]	0.046
3007	7662688	gi 7662688 gb AAF66138.1  (L00016) urf4 [Homo sapiens]	1.7
3013	14150037	gi 14150037 ref NP_115666.1  hypothetical protein DKFZp761C121 [Homo sapiens] ref XP_027894.1  hypothetical protein DKFZp761C121 [Homo sapiens] emb CAB66495.1  (AL136560) hypothetical protein [Homo sapiens]	0.00000001
3014	7243706	gi 7243706 gb AAF43421.1 AF233291_1 (AF233291) epsin-like protein [Drosophila melanogaster]	6.5
3019	7293274	gi 7293274 gb AAF48655.1  (AE003503) CG9644 gene product [Drosophila melanogaster]	0.47
3025	11414881	gi 11414881 dbj BAB18568.1  (AB028173) HCCA2 [Homo sapiens]	8.6
3026	11359423	gi 11359423 pir T48729 hypothetical protein 8D4.30 [imported] - Neurospora crassa emb CAB88545.1  (AL353819) conserved hypothetical protein [Neurospora crassa]	0.66
3028	2118405	gi 2118405 pir I51018 cobra venom factor precursor - monocled cobra gb AAA68989.1  (U09969) cobra venom factor precursor [Naja naja]	3.1
3029	2739145	gi 2739145 gb AAC98522.1  (AF030306) envelope protein; ORF4 [Porcine reproductive and respiratory syndrome virus]	4.3
3030	13549158	gi 13549158 gb AAK29672.1 AF353095_1 (AF353095) protein synthesis initiation factor eIF2 beta [Arabidopsis thaliana]	6.3

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
3034	14753542	gi 14753542 ref XP_046011.1  53288 [Homo sapiens]	0.000000006
3042	3150471	gi 3150471 gb AAC16989.1  (AF067211) Hypothetical protein B0205.2 [Caenorhabditis elegans]	0.56
3044	14734012	gi 14734012 ref XP_051005.1  KIAA1297 protein [Homo sapiens]	0.16
3047	7493994	gi 7493994 pir JC6564 cellobiose oxidase (EC 1.1.3.25) precursor - white-rot fungus (Trametes versicolor)	6.1
3056	114351	gi 114351 sp P08314 ATI2_HSV1F ALPHA TRANS-INDUCING FACTOR 77 KD PROTEIN pir TNBE77 77K alpha trans-inducing protein - human herpesvirus 1 (strain F) gb AAA45768.1  (M15621) alpha trans-inducing factor 77kb [human herpesvirus 1]	7
3069	6562755	gi 6562755 emb CAB62894.1  (AL035475) possible ribosomal protein [Plasmodium falciparum]	6.4
3071	804764	gi 804764 gb AAA65999.1  (M27826) neutral protease large subunit [Homo sapiens]	0.00003
3079	14768311	gi 14768311 ref XP_048396.1  methyl CpG binding protein 2 [Homo sapiens]	0.65
3080	11994604	gi 11994604 dbj BAB02658.1  (AP002062) gene_id:T22B15.11~unknown protein [Arabidopsis thaliana]	5
3083	7302673	gi 7302673 gb AAF57753.1  (AE003800) stau gene product [alt 2] [Drosophila melanogaster]	9.2
3085	7494170	gi 7494170 pir D71613 GAF domain protein (cyclic nt signal transduct.) PFB0510w - malaria parasite (Plasmodium falciparum) gb AAC71891.1  (AE001399) GAF domain protein (cyclic nt signal transduct.) [Plasmodium falciparum]	8.1
3087	14590168	gi 14590168 ref NP_142233.1  hypothetical protein [Pyrococcus horikoshii] pir F71247 hypothetical protein PH0237 - Pyrococcus horikoshii dbj BAA29309.1  (AP000001) 230aa long hypothetical protein [Pyrococcus horikoshii]	2.3
3097	14326099	gi 14326099 gb AAK60138.1 AF365405_1 (AF365405) ribosomal protein S14 [Schizosaccharomyces pombe]	3

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
3098	2499244	gi 2499244 sp Q35140 NU2M_NEUCR NADH-UBIQUINONE OXIDOREDUCTASE CHAIN 2 pir A25096 NADH dehydrogenase (ubiquinone) (EC 1.6.5.3) chain 2 - Neurospora crassa mitochondrion emb CAA27418.1  (X03793) put. URF-2 like protein (aa 1-583) [Neurospora crassa]	8.1
3101	113668	gi 113668 sp P23961 ALUC_HUMAN !!!! ALU CLASS C WARNING ENTRY !!!!	6.5
3105	12721131	gi 12721131 gb AAK02908.1  (AE006121) unknown [Pasteurella multocida]	9.2
3107	12621134	gi 12621134 ref NP_075244.1  MEGF6 [Rattus norvegicus] pir T13954 MEGF6 protein - rat dbj BAA32462.1  (AB011532) MEGF6 [Rattus norvegicus]	2.1
3108	1346666	gi 1346666 sp P48305 NB5M_BOVIN NADH-UBIQUINONE OXIDOREDUCTASE B15 SUBUNIT (COMPLEX I-B15) (CI-B15) pir S28237 NADH dehydrogenase (ubiquinone) (EC 1.6.5.3) chain B15 - bovine emb CAA46107.1  (X64898) B15 subunit of the NADH: ubiquinone oxidoreductase complex [Bos taurus]	0.47
3111	462022	gi 462022 sp P33948 ERD2_PLAFA ER LUMEN PROTEIN RETAINING RECEPTOR pir S39609 ERD2 protein - malaria parasite (Plasmodium falciparum) emb CAA81128.1  (Z26043) ERD2 [Plasmodium falciparum] emb CAA52861.1  (X74869) PFERD2 [Plasmodium falciparum]	0.95
3114	12831427	gi 12831427 gb AAK02082.1  (AY014401) site-specific recombinase IntIA [Listonella pelagia]	8.3
3117	7657530	gi 7657530 ref NP_055248.1  rhabdoid tumor deletion region protein 1 [Homo sapiens] ref XP_009866.1  rhabdoid tumor deletion region protein 1 [Homo sapiens] ref XP_037053.1  rhabdoid tumor deletion region protein 1 [Homo sapiens] gb AAF02484.1 AF133587_1 (AF133587) rhabdoid tumor deletion region protein 1 [Homo sapiens] gb AAH08986.1 AAH08986 (BC008986) rhabdoid tumor deletion region protein 1 [Homo sapiens]	7.8
3123	12083527	gi 12083527 gb AAG48836.1 AC084218_6 (AC084218) similar to Arabidopsis thaliana DNA-directed RNA polymerase (EC 2.7.7.6) II largest chain (JDMU1) [Oryza sativa]	6.9

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
3126	2565196	gi 2565196 gb AAB81938.1  (AF000381) non-functional folate binding protein [Homo sapiens]	8.8
3132	8923808	gi 8923808 ref NP_060941.1  uncharacterized hypothalamus protein HT010 [Homo sapiens] gb AAF67649.1 AF220184_1 (AF220184) uncharacterized hypothalamus protein HT010 [Homo sapiens]	7E-13
3138	14755072	gi 14755072 ref XP_048449.1  hypothetical protein XP_048449 [Homo sapiens]	9.5
3141	1085507	gi 1085507 pir  S52306 zinc finger protein 10 - mouse emb CAA85283.1  (Z36270) GC Binding Protein - 23b [Mus musculus]	6.7
3142	4417278	gi 4417278 gb AAD20403.1  (AC007019) unknown protein [Arabidopsis thaliana]	2.8
3148	12084884	gi 12084884 ref NP_073349.1  UL54 post-translational gene regulation protein [Meleagrid herpesvirus 1] gb AAG45793.1 AF291866_60 (AF291866) UL54 post-translational gene regulation protein [Meleagrid herpesvirus 1]	8.2
3151	13122204	gi 13122204 emb CAB89584.2  (AL354512) possible non-canonical ubiquitin conjugating enzyme 1 [Leishmania major]	0.65
3153	418745	gi 418745 pir  S34959 NADH dehydrogenase (ubiquinone) (EC 1.6.5.3) chain 4 - Crithidia oncopelti mitochondrion emb CAA39491.1  (X56015) NADH dehydrogenase subunit 4 [Crithidia oncopelti]	1
3157	6015766	gi 6015766 emb CAB57593.1  (Y18930) hypothetical protein [Sulfolobus solfataricus]	7.7
3162	6983867	gi 6983867 dbj BAA90802.1  (AP001168) Similar to putative salt-inducible protein (AC006248) [Oryza sativa]	2.8
3163	11467948	gi 11467948 sp O65404 ER11_ARATH SQUALENE MONOOXYGENASE 1,1 (SQUALENE EPOXIDASE 1,1) (SE 1,1) dbj BAB08406.1  (AB016883) squalene monooxygenase [Arabidopsis thaliana]	6.1
3167	3461813	gi 3461813 gb AAC32907.1  (AC004138) putative sucrose-proton symporter [Arabidopsis thaliana] emb CAB92307.1  (AJ289165) sucrose transporter [Arabidopsis thaliana]	4.4

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
3168	6753576	gi 6753576 ref NP_034128.1  cytochrome P450, 2b10, phenobarbital inducible, type b [Mus musculus] sp P12791 CPBA_MOUSE CYTOCHROME P450 2B10 (CYP11B10) (TESTOSTERONE 16-ALPHA HYDROXYLASE) (P450-16-ALPHA) (CLONE PF3/46) pir B31047 testosterone 16alpha-hydroxylase (EC 1.14.14.-) cytochrome P450 2B10 - mouse gb AAA40425.1  (M21856) testosterone 16-alpha-hydroxylase [Mus musculus]	7.6
3174	585811	gi 585811 sp Q08517 REFR_SPVKA RIFAMPICIN RESISTANCE PROTEIN (62 KD PROTEIN) gb AAA16176.1  (L22012) ORF H1L [Swinepox virus]	6.9
3176	14714688	gi 14714688 gb AAH10485.1 AAH10485 (BC010485) Unknown (protein for MGC:7224) [Mus musculus]	2.1
3178	10047191	gi 10047191 dbj BAB13389.1  (AB046783) KIAA1563 protein [Homo sapiens]	4E-26
3180	6324246	gi 6324246 ref NP_014316.1  Ynl083wp [Saccharomyces cerevisiae] pir S57539 probable membrane protein YNL083w - yeast (Saccharomyces cerevisiae) emb CAA61427.1  (X89016) ORF N2312 [Saccharomyces cerevisiae] emb CAA95958.1  (Z71359) ORF YNL083w [Saccharomyces cerevisiae]	0.24
3184	7494290	gi 7494290 pir C71618 hypothetical protein PFB0315w malaria parasite (Plasmodium falciparum) gb AAC71852.1  (AE001386) hypothetical protein [Plasmodium falciparum]	0.084
3185	6754948	gi 6754948 ref NP_036089.1  origin recognition complex, subunit 5 homolog (S. cerevisiae); mouse origin recognition complex 5 [Mus musculus] sp Q9WUV0 ORC5_MOUSE ORIGIN RECOGNITION COMPLEX SUBUNIT 5 emb CAB43767.1  (AJ007360) ORC5-related protein [Mus musculus] gb AAH06927.1 AAH06927 (BC006927) origin recognition complex, subunit 5 homolog (S. cerevisiae) [Mus musculus]	8.5
3199	7295489	gi 7295489 gb AAF50803.1  (AE003567) CG10671 gene product [Drosophila melanogaster]	4.3

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
3203	14741894	gi 14741894 ref XP_049656.1  hypothetical protein XP_049656 [Homo sapiens]	4
3208	14520989	gi 14520989 ref NP_126464.1  hypothetical protein [Pyrococcus abyssi] pir F75122 hypothetical protein PAB1844 - Pyrococcus abyssi (strain Orsay) emb CAB49695.1  (AJ248285) hypothetical protein [Pyrococcus abyssi]	4.1
3210	9911016	gi 9911016 sp P76543 YFFL_ECOLI HYPOTHETICAL 25.1 KDA PROTEIN IN EUTB-EUTH INTERGENIC REGION pir B65019 hypothetical protein b2443 - Escherichia coli (strain K-12) gb AAC75496.1  (AE000331) orf, hypothetical protein [Escherichia coli K12]	7.9
3211	9626990	gi 9626990 ref NP_056868.1  No definition line found gb AAB92648.1  (AF035403) No definition line found [Turnip yellow mosaic virus]	3.7
3213	7504416	gi 7504416 pir T16477 hypothetical protein F56D2.5 - Caenorhabditis elegans gb AAB52683.1  (U13644) F56D2.5 gene product [Caenorhabditis elegans]	8.4
3216	14746120	gi 14746120 ref XP_005163.2  cadherin 17, LI cadherin (liver-intestine) [Homo sapiens] ref XP_043524.1  cadherin 17, LI cadherin (liver-intestine) [Homo sapiens]	1E-18
3217	9366835	gi 9366835 emb CAB95597.1  (AL359782) hypothetical protein, CHR1.368 [Trypanosoma brucei]	4.1
3218	6272295	gi 6272295 gb AAF06072.1 AF072715_3 (AF072715) unknown [Mycoplasma mycoides subsp. capri]	0.17
3220	7293488	gi 7293488 gb AAF48863.1  (AE003509) CG15040 gene product [Drosophila melanogaster]	2.8
3223	7662432	gi 7662432 ref NP_055769.1  KIAA0985 protein [Homo sapiens] ref XP_007006.3  KIAA0985 protein [Homo sapiens] sp Q9Y2J0 RP3A_HUMAN RABPHILIN-3A dbj BAA76829.1  (AB023202) KIAA0985 protein [Homo sapiens]	0.18
3225	7504860	gi 7504860 pir T33299 hypothetical protein H05B21.4 - Caenorhabditis elegans gb AAC17764.1  (AF068717) Hypothetical protein H05B21.4 [Caenorhabditis elegans]	3.7

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
3226	6708056	gi 6708056 gb AAF25780.1 AF163311_1 (AF163311) Kal1.2 [Danio rerio]	2.5
3229	13473697	gi 13473697 ref NP_105265.1  acyl-CoA thioesterase [Mesorhizobium loti] dbj BAB51051.1  (AP003004) acyl-CoA thioesterase [Mesorhizobium loti]	5.4
3230	12964703	gi 12964703 gb AAK11280.1 AF315035_1 (AF315035) phosphocholine cytidyltransferase [Plasmodium falciparum]	2.1
3231	7521951	gi 7521951 pir T30180 hypothetical protein - Shewanella sp gb AAB81120.1  (U73935) unknown [Shewanella sp. SCRC-2738]	6
3232	3249620	gi 3249620 gb AAC24120.1  (AF067182) IDI-2 precursor [Podospora anserina]	3.1
3233	7493160	gi 7493160 pir T40507 probable vacuolar protein sorting-associated protein - fission yeast (Schizosaccharomyces pombe) emb CAA20730.1  (AL031534) putative vacuolar protein sorting- associated protein [Schizosaccharomyces pombe]	5.5
3237	7462822	gi 7462822 pir C72269 hypothetical protein TM1297 - Thermotoga maritima (strain MSB8) gb AAD36371.1 AE001785_2 (AE001785) oxidoreductase, putative [Thermotoga maritima]	5.5
3241	1531651	gi 1531651 gb AAC61662.1  (U67083) KRAB-zinc finger protein KZF-2 [Rattus norvegicus]	4.6
3247	2118405	gi 2118405 pir I51018 cobra venom factor precursor - monocled cobra gb AAA68989.1  (U09969) cobra venom factor precursor [Naja naja]	9.2
3253	11499508	gi 11499508 ref NP_070749.1  LSU ribosomal protein L4P (rpl4P) [Archaeoglobus fulgidus] sp O28355 RL4_ARCFU 50S RIBOSOMAL PROTEIN L4/L1E pir C69490 LSU ribosomal protein L4P (rpl4P) homolog - Archaeoglobus fulgidus gb AAB89332.1  (AE000971) LSU ribosomal protein L4P (rpl4P) [Archaeoglobus fulgidus]	2.9



Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
3258	461509	gi 461509 sp Q03045 AMYG_HORRE GLUCOAMYLASE P PRECURSOR (GLUCAN 1,4- ALPHA-GLUCOSIDASE) (1,4-ALPHA-D-GLUCAN GLUCOHYDROLASE) pir  S33908 glucan 1,4-alpha- glucosidase (EC 3.2.1.3) P precursor - creosote fungus emb CAA47945.1  (X67708) 1, 4-alpha-D-glucan glucohydrolase; glucan 1,4-alpha-glucosidase [Amorphotheca resinae] emb CAA48243.1  (X68143) glucan 1,4-alpha-glucosidase [Amorphotheca resinae] prf  1907167A glucoamylase P [Amorphotheca resinae] prf  2113213A glucoamylase P [Amorphotheca resinae]	5.8
3260	5817900	gi 5817900 gb AAD52976.1  (AF176771) reverse transcriptase [Human immunodeficiency virus type 2]	6.1
3262	12804147	gi 12804147 gb AAH02928.1 AAH02928 (BC002928) Unknown (protein for MGC:11357) [Homo sapiens]	3E-14
3266	6323756	gi 6323756 ref NP_013827.1  myosin I; Myo5p [Saccharomyces cerevisiae] sp Q04439 YMZ9_YEAST HYPOTHETICAL MYOSIN-LIKE PROTEIN IN ILV2-ADE17 INTERGENIC REGION pir  S54570 probable membrane protein YMR109w - yeast (Saccharomyces cerevisiae) emb CAA89745.1  (Z49702) unknown [Saccharomyces cerevisiae] gb AAB37419.1  Myo5p=actin patch localized myosin I variant/MYO5 product [Saccharomyces cerevisiae=yeast, Peptide, 1219 aa]	0.24
3271	12848866	gi 12848866 dbj BAB28115.1  (AK012246) putative [Mus musculus]	0.011
3273	4758842	gi 4758842 ref NP_004551.1  receptor tyrosine kinase- like orphan receptor 2; Ror2; neurotrophic tyrosine kinase, receptor-related 2 [Homo sapiens] sp Q01974 ROR2_HUMAN TYROSINE-PROTEIN KINASE TRANSMEMBRANE RECEPTOR ROR2 PRECURSOR (NEUROTROPHIC TYROSINE KINASE, RECEPTOR-RELATED 2) pir  B45082 neurotrophic receptor ror2 precursor - human gb AAA60276.1  (M97639) transmembrane receptor [Homo sapiens]	5.6

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
3274	913140	gi 913140 gb AAB33486.1  ARK2 product/receptor-like serine/threonine protein kinase ARK2 [Arabidopsis thaliana, Columbia, Peptide, 850 aa]	1.7
3276	11357726	gi 11357726 pir T51437 hypothetical protein F2G14_40 - Arabidopsis thaliana emb CAC01811.1  (AL391146) putative protein [Arabidopsis thaliana] gb AAK49610.1 AF372894_1 (AF372894) AT5g14920/F2G14_40 [Arabidopsis thaliana] gb AAK74054.1  (AY045696) AT5g14920/F2G14_40 [Arabidopsis thaliana]	2
3277	7511204	gi 7511204 pir T27899 hypothetical protein ZK546.5 - Caenorhabditis elegans gb AAA68738.1  (U29380) Hypothetical protein ZK546.5 [Caenorhabditis elegans]	3.4
3279	7492154	gi 7492154 pir T38426 major facilitator protein homolog - fission yeast (Schizosaccharomyces pombe)	6
3285	14764251	gi 14764251 ref XP_011989.3  ELKL motif kinase 1 isoform a [Homo sapiens]	9E-18
3286	126686	gi 126686 sp P27424 MGP1_BOVIN MICROFIBRIL-ASSOCIATED GLYCOPROTEIN PRECURSOR (MAGP) (MAGP-1) (TROPOELASTIN-BINDING PROTEIN) pir A54151 microfibril-associated glycoprotein precursor - bovine gb AAA62715.1  (M59851) microfibril-associated glycoprotein [Bos taurus] gb AAB29686.1  (S68064) microfibril-associated glycoprotein, MAGP=tropoelastin-binding protein [cattle, Peptide Partial, 183 aa] [Bos taurus]	5.4
3293	13622462	gi 13622462 gb AAK34181.1  (AE006573) conserved hypothetical protein [Streptococcus pyogenes M1 GAS]	6
3295	7523494	gi 7523494 dbj BAA94222.1  (AP001633) hypothetical protein [Oryza sativa]	0.16
3301	5815436	gi 5815436 gb AAD52672.1 AF178772_1 (AF178772) 98kDa HDM allergen [Dermatophagoides farinae]	8.3

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
3302	7522146	gi 7522146 pir T17467 rifamycin polyketide synthase modules 9-10 - <i>Amycolatopsis mediterranei</i> emb CAA11039.1  (AJ223012) rifamycin polyketide synthase, type 1 [ <i>Amycolatopsis mediterranei</i> ] gb AAC01714.1  (AF040570) polyketide synthase [ <i>Amycolatopsis mediterranei</i> ]	8.5
3313	14737876	gi 14737876 ref XP_031833.1  collagen, type V, alpha 1 [ <i>Homo sapiens</i> ]	9.6
3316	10092673	gi 10092673 ref NP_064709.1  hypothetical protein [ <i>Homo sapiens</i> ] ref XP_048065.1  hypothetical protein [ <i>Homo sapiens</i> ] gb AAC24312.1  (AC004382) Unknown gene product [ <i>Homo sapiens</i> ]	0.000002
3317	135937	gi 135937 sp P04924 TNFA_RABIT TUMOR NECROSIS FACTOR PRECURSOR (TNF-ALPHA) (CACHECTIN) gb AAA31482.1  (M12846) tumor necrosis factor [ <i>Oryctolagus cuniculus</i> ] gb AAA31484.1  (M60340) tumor necrosis factor [ <i>Oryctolagus cuniculus</i> ]	8.2
3318	11282039	gi 11282039 pir C82096 aminoacyl-histidine dipeptidase VC2279 [imported] - <i>Vibrio cholerae</i> (group O1 strain N16961) gb AAF95423.1  (AE004299) aminoacyl-histidine dipeptidase [ <i>Vibrio cholerae</i> ]	0.73
3320	11360605	gi 11360605 pir A81752 conserved hypothetical protein TC0009 [imported] - <i>Chlamydia muridarum</i> (strain Nigg) gb AAF38902.1  (AE002269) conserved hypothetical protein [ <i>Chlamydia muridarum</i> ]	9.2
3321	7491033	gi 7491033 pir T38495 hypothetical protein SPAC29B12.07 - fission yeast ( <i>Schizosaccharomyces pombe</i> )	0.46
3322	102425	gi 102425 pir B41132 collagen-related protein 2 - <i>Hydra magnipapillata</i> (fragment) pir S21930 mini-collagen - <i>Hydra</i> sp emb CAA43380.1  (X61046) mini-collagen [ <i>Hydra</i> sp.]	0.99
3328	7507644	gi 7507644 pir T25887 hypothetical protein T10H10.2 - <i>Caenorhabditis elegans</i> gb AAB37989.1  (U80848) T10H10.2 gene product [ <i>Caenorhabditis elegans</i> ]	4.3

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
3331	3738325	gi 3738325 gb AAC63666.1  (AC005170) cyclic nucleotide and calmodulin-regulated ion channel [Arabidopsis thaliana]	9.1
3332	8978523	gi 8978523 dbj BAA98360.1  (AP002545) CT147 hypothetical protein [Chlamydomonas reinhardtii]	8.3
3337	12382001	gi 12382001 dbj BAB21270.1  (AP002844) hypothetical protein [Oryza sativa]	2.6
3338	11466493	gi 11466493 ref NP_038196.1  cytochrome c oxidase subunit 3 [Chrysodidymus synuroideus] gb AAF36962.1 AF222718_36 (AF222718) cytochrome c oxidase subunit 3 [Chrysodidymus synuroideus]	5.4
3339	7475952	gi 7475952 pir H69754 two-component sensor histidine kinase homolog yccG - Bacillus subtilis dbj BAA22234.1  (AB000617) YccG [Bacillus subtilis] emb CAB12067.1  (Z99105) similar to two-component sensor histidine kinase [YccH] [Bacillus subtilis]	5.9
3344	340613	gi 340613 gb AAA31881.1  (L07545) A 'c' was inserted after nt 369 (=nt 10459 in genomic sequence (M10126)) to correct -1 frameshift probably due to gel compression [Leishmania tarentolae]	1.4
3345	10121788	gi 10121788 gb AAG13373.1  (AF268180) polypeptide [bovine viral diarrhea virus type 2]	5.4
3346	3641252	gi 3641252 gb AAC36318.1  (AF053127) leucine-rich receptor-like protein kinase [Malus x domestica]	0.49
3347	6226170	gi 6226170 sp O67271 SYE_AQUAE GLUTAMYL-TRNA SYNTHETASE (GLUTAMATE--TRNA LIGASE) (GLURS) pir D70405 glutamate--trRNA ligase (EC 6.1.1.17) - Aquifex aeolicus gb AAC07230.1  (AE000729) glutamyl-tRNA synthetase [Aquifex aeolicus]	3
3348	2127912	gi 2127912 pir B64428 formate hydrogenlyase, subunit 5 - Methanococcus jannaschii gb AAB99031.1  (U67545) formate hydrogenlyase, subunit 5 [Methanococcus jannaschii]	2.9

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
3351	7507391	gi 7507391 pir T24665 hypothetical protein T07F10.4 - <i>Caenorhabditis elegans</i> emb CAB01241.1  (Z77669) predicted using Genefinder~Similarity to Human mRNA (KIAA0033) (TR:G436224) [ <i>Caenorhabditis elegans</i> ]	6.3
3355	7476137	gi 7476137 pir A70989 hypothetical glycine-rich protein Rv1768 - <i>Mycobacterium tuberculosis</i> (strain H37RV) emb CAB09311.1  (Z95890) PE_PGRS [ <i>Mycobacterium tuberculosis</i> ]	4.1
3359	6782280	gi 6782280 emb CAB70102.1  (AL132949) Y53F4B.7 [ <i>Caenorhabditis elegans</i> ] emb CAB70113.2  (AL132949) Y53F4B.26 [ <i>Caenorhabditis elegans</i> ]	5.6
3361	14133241	gi 14133241 dbj BAA86438.2  (AB032950) KIAA1124 protein [ <i>Homo sapiens</i> ]	0.28
3362	117000	gi 117000 sp P04371 COX1_TRYBB CYTOCHROME C OXIDASE POLYPEPTIDE I pir ODUTMB cytochrome-c oxidase (EC 1.9.3.1) chain I - <i>Trypanosoma brucei</i> mitochondrion gb AAB59223.1  (M14820) cytochrome c oxidase subunit I [ <i>Trypanosoma brucei</i> ] emb CAB57806.1  (X01094) put. gene for cytochrome c oxidase subunit I gene [ <i>Trypanosoma brucei</i> ]	1.7
3369	2072972	gi 2072972 gb AAC51276.1  (U93572) putative p150 [ <i>Homo sapiens</i> ]	0.000008
3371	13476092	gi 13476092 ref NP_107662.1  ABC transporter permease protein [ <i>Mesorhizobium loti</i> ] dbj BAB53448.1  (AP003011) ABC transporter permease protein [ <i>Mesorhizobium loti</i> ]	0.43
3372	13385538	gi 13385538 ref NP_080316.1  RIKEN cDNA 2810036K01 gene [ <i>Mus musculus</i> ] dbj BAB28520.1  (AK012865) putative [ <i>Mus musculus</i> ]	2E-58
3376	14765434	gi 14765434 ref XP_030354.1  similar to KIAA0220 protein ( <i>H. sapiens</i> ) [ <i>Homo sapiens</i> ]	8
3393	10641134	gi 10641134 dbj BAB16313.1  (AB049587) fork head/HNF-3 homologue [ <i>Ciona savignyi</i> ]	9.2
3396	11358605	gi 11358605 pir T49882 pectin methyl-esterase-like protein - <i>Arabidopsis thaliana</i> emb CAB87932.1  (AL163912) pectin methyl-esterase-like protein [ <i>Arabidopsis thaliana</i> ]	4.1

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
3397	4493932	gi 4493932 emb CAB38968.1  (AL034556) Hypothetical protein, PFC0580c [Plasmodium falciparum]	7
3400	11496667	gi 11496667 ref NP_045466.1  conserved hypothetical protein [Borrelia burgdorferi] pir F70231 conserved hypothetical protein BBG06 - Lyme disease spirochete plasmid G/lp28-2 gb AAC66054.1  (AE000786) conserved hypothetical protein [Borrelia burgdorferi]	7.3
3403	7020787	gi 7020787 dbj BAA91274.1  (AK000589) unnamed protein product [Homo sapiens]	5E-19
3404	12045115	gi 12045115 ref NP_072926.1  lipoprotein, putative [Mycoplasma genitalium] sp P47502 Y260_MYCGE HYPOTHETICAL LIPOPROTEIN MG260 PRECURSOR pir G64228 hypothetical protein homolog MG260 - Mycoplasma genitalium gb AAC71481.1  (U39705) lipoprotein, putative [Mycoplasma genitalium]	3.4
3407	13959004	gi 13959004 gb AAK51055.1 AF361075_2 (AF361075) UL24 [Canine herpesvirus]	0.89
3408	13814730	gi 13814730 gb AAK41724.1  (AE006765) Hypothetical protein [Sulfolobus solfataricus]	9.1
3415	12744896	gi 12744896 gb AAK06840.1 AF329637_1 (AF329637) mitofusin 1 precursor [Homo sapiens]	0.16
3416	8922500	gi 8922500 ref NP_060600.1  hypothetical protein FLJ10539 [Homo sapiens] dbj BAA91669.1  (AK001401) unnamed protein product [Homo sapiens]	7.1
3418	6635084	gi 6635084 emb CAB64573.1  (AL135930) hypothetical protein L4738.02 [Leishmania major]	3.5
3419	296559	gi 296559 emb CAA49925.1  (X70529) ORF YBR1730 [Saccharomyces cerevisiae]	0.42
3422	5579432	gi 5579432 gb AAD45553.1 U70376_18 (U70376) Spch [Streptomyces netropsis]	6.3
3423	11466493	gi 11466493 ref NP_038196.1  cytochrome c oxidase subunit 3 [Chrysodidymus synuroideus] gb AAF36962.1 AF222718_36 (AF222718) cytochrome c oxidase subunit 3 [Chrysodidymus synuroideus]	6
3424	1084985	gi 1084985 pir S51908 cryptogene protein G1(ND9) - Leishmania tarentolae (strain LEM125)	6.6
3426	8778413	gi 8778413 gb AAF79421.1 AC025808_3 (AC025808) F18O14.6 [Arabidopsis thaliana]	4.2

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
3430	13992688	gi 13992688 gb AAK51582.1 AC022352_18 (AC022352) Putative retroelement [Oryza sativa]	9.3
3431	9280694	gi 9280694 gb AAF86563.1 AC069252_22 (AC069252) F2E2.6 [Arabidopsis thaliana]	3.3
3437	4115918	gi 4115918 gb AAD03429.1  (AF118222) similar to nascent polypeptide associated complex alpha chain [Arabidopsis thaliana]	4.4
3438	7433244	gi 7433244 pir T01751 gibberellin 20-oxidase - common tobacco dbj BAA31690.1  (AB016084) Ntc16 [Nicotiana tabacum]	1.2
3439	3978489	gi 3978489 gb AAC83366.1  (AF092918) unknown [Pseudomonas alcaligenes]	8.5
3441	7506359	gi 7506359 pir T23969 hypothetical protein R06C7.5 - Caenorhabditis elegans emb CAA95843.1  (Z71266) Similarity to Human adenylosuccinate lyase (SW:PUR8_HUMAN), contains similarity to Pfam domain: PF00206 (Lyase), Score=165.2, E-value=3.5e-46, N=1~cDNA EST EMBL:Z14522 comes from this gene~cDNA EST yk67g5.3 comes from this gene~cDNA EST yk67g5>	5.9
3443	12852662	gi 12852662 dbj BAB29494.1  (AK014667) putative [Mus musculus]	2E-28
3448	9256527	gi 9256527 ref NP_061764.1  ceroid-lipofuscinosis, neuronal 8 (epilepsy, progressive with mental retardation) [Homo sapiens] gb AAF13115.1 AF123757_1 (AF123757) putative transmembrane protein [Homo sapiens] gb AAF13116.1 AF123758_1 (AF123758) putative transmembrane protein [Homo sapiens] gb AAF13117.1 AF123759_1 (AF123759) putative transmembrane protein [Homo sapiens] gb AAF13118.1 AF123760_1 (AF123760) putative transmembrane protein [Homo sapiens] gb AAF13119.1 AF123761_1 (AF123761) putative transmembrane protein [Homo sapiens]	2.7
3457	7705167	gi 7705167 gb AAC60545.2  (S54379) sucrose-phosphate synthase; SPS [Spinacia oleracea]	8.6
3461	10179322	gi 10179322 dbj BAB13673.1  (AB041350) type IV collagen alpha 5 chain [Mus musculus]	0.25
3462	13882453	gi 13882453 gb AAK47018.1  (AE007102) hypothetical protein [Mycobacterium tuberculosis CDC1551]	3.6

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
3466	2499996	gi 2499996 sp Q45298 PTGA_CORGL PTS SYSTEM, GLUCOSE-SPECIFIC IABC COMPONENT (EIIABC-GLC) (GLUCOSE-PERMEASE IABC COMPONENT) (PHOSPHOTRANSFERASE ENZYME II, ABC COMPONENT) (EII-GLC/EIII-GLC) gb AAA22992.1  (L18875) phosphoenolpyruvate sugar phosphotransferase [Corynebacterium glutamicum]	9.9
3467	7503384	gi 7503384 pir T31714 probable zinc proteinase (EC 3.4.24.-) F44E7.4 - Caenorhabditis elegans gb AAC25789.1  (AF016421) Hypothetical protein F44E7.4 [Caenorhabditis elegans]	5.1
3472	225485	gi 225485 prf 1304284B beejin [Dictyostelium discoideum]	5
3482	7302644	gi 7302644 gb AAF57724.1  (AE003800) fj gene product [Drosophila melanogaster]	0.19
3487	3121914	gi 3121914 sp Q37679 COX3_THEAN CYTOCHROME C OXIDASE POLYPEPTIDE III gb AAA73631.1  (U32225) cytochrome oxidase polypeptide III [Theileria annulata]	6.9
3489	1351243	gi 1351243 sp P47749 THRR_XENLA THROMBIN RECEPTOR PRECURSOR pir I51667 thrombin receptor - African clawed frog gb AAA18498.1  (U09632) thrombin receptor [Xenopus laevis]	6.2
3491	12517831	gi 12517831 gb AAG58344.1 AE005549_1 (AE005549) aerobic respiration sensor-response protein; histidine protein kinase/phosphatase, sensor for arcA [Escherichia coli O157:H7 EDL933] dbj BAB37512.1  (AP002564) aerobic respiration sensor-response protein [Escherichia coli O157:H7]	6.9
3492	2240037	gi 2240037 gb AAB66910.1  (AF005356) integrin subunit betaCn1 [Acropora millepora]	5.5
3494	14742385	gi 14742385 ref XP_046349.1  33219 [Homo sapiens]	4.6
3501	12847027	gi 12847027 dbj BAB27408.1  (AK011113) putative [Mus musculus]	5.6
3505	1763691	gi 1763691 gb AAB39835.1  (U72048) glycoprotein [Classical swine fever virus]	1.2
3507	13470696	gi 13470696 ref NP_102265.1  unknown protein [Mesorhizobium loti] dbj BAB48051.1  (AP002994) unknown protein [Mesorhizobium loti]	5.1



Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
3511	7706335	gi 7706335 ref NP_057140.1  CGI-119 protein [Homo sapiens] gb AAD34114.1 AF151877_1 (AF151877) CGI-119 protein [Homo sapiens]	2.3
3512	13812236	gi 13812236 ref NP_113367.1  hypothetical protein [Guillardia theta] gb AAK39923.1 AF165818_131 (AF165818) hypothetical protein [Guillardia theta]	2.4
3513	7510320	gi 7510320 pir T33571 hypothetical protein Y59C2A.2 - Caenorhabditis elegans gb AAC68742.1  (AF099003) Y59C2A.2 gene product [Caenorhabditis elegans]	0.37
3517	12724149	gi 12724149 gb AAK05281.1 AE006350_8 (AE006350) HYPOTHETICAL PROTEIN [Lactococcus lactis subsp. lactis]	1.7
3519	2342679	gi 2342679 gb AAB70402.1  (AC000106) Similar to Vicia sativa ENBP1 (gb X95995). [Arabidopsis thaliana]	5.2
3520	7305389	gi 7305389 ref NP_038658.1  polycystic kidney disease 1 homolog; polycystin-1 [Mus musculus] gb AAC53207.1  (U70209) polycystic kidney disease 1 protein [Mus musculus]	2.2
3523	1353257	gi 1353257 gb AAB06234.1  (U26665) dimethyl sulphoxide reductase subunit B [Haemophilus influenzae]	3.9
3524	14794474	gi 14794474 gb AAK73355.1 AF390546_1 (AF390546) gut-enriched kruppel-like factor [Rattus norvegicus]	0.47
3527	7510320	gi 7510320 pir T33571 hypothetical protein Y59C2A.2 - Caenorhabditis elegans gb AAC68742.1  (AF099003) Y59C2A.2 gene product [Caenorhabditis elegans]	0.89
3530	10173181	gi 10173181 dbj BAB04286.1  (AP001509) nickel transport system (nickel-binding protein) [Bacillus halodurans]	4.6
3531	7442453	gi 7442453 pir G72215 oligopeptide ABC transporter, permease protein - Thermotoga maritima (strain MSB8) gb AAD36813.1 AE001813_5 (AE001813) oligopeptide ABC transporter, permease protein [Thermotoga maritima]	8.7
3532	11136027	gi 11136027 sp O88553 ZF37_RAT ZINC FINGER PROTEIN 37 (ZFP-37) gb AAC24590.1  (AF072439) zinc-finger protein-37; ZFP-37 [Rattus norvegicus]	1.8

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
3538	14732500	gi 14732500 ref XP_041698.1  hypothetical protein FLJ10904 [Homo sapiens] ref XP_041699.1  50659 [Homo sapiens]	8.5
3540	7438506	gi 7438506 pir T09963 mitosis-specific cyclin B-type - Madagascar periwinkle dbj BAA20411.1  (D86386) B-type cyclin [Catharanthus roseus]	0.75
3541	7495199	gi 7495199 pir T31857 hypothetical protein C02E7.14 - Caenorhabditis elegans gb AAC24171.1  (AF016446) Hypothetical protein C02E7.14 [Caenorhabditis elegans]	4.9
3542	162223	gi 162223 gb AAA30233.1  (M27163) RNA polymerase III [Trypanosoma brucei]	4.9
3546	6635084	gi 6635084 emb CAB64573.1  (AL135930) hypothetical protein L4738.02 [Leishmania major]	2.7
3549	13095647	gi 13095647 ref NP_076562.1  unknown [Bovine herpesvirus 4] gb AAK07989.1 AF318573_69 (AF318573) unknown [Bovine herpesvirus 4]	6.9
3551	11359423	gi 11359423 pir T48729 hypothetical protein 8D4.30 [imported] - Neurospora crassa emb CAB88545.1  (AL353819) conserved hypothetical protein [Neurospora crassa]	5.3
3556	13241881	gi 13241881 gb AAK16450.1  (AF327992) cytochrome oxidase subunit I [Platydictyon undatus]	9.7
3562	4589564	gi 4589564 dbj BAA76804.1  (AB023177) KIAA0960 protein [Homo sapiens]	4.8
3563	7486330	gi 7486330 pir T05113 hypothetical protein F28M20.240 - Arabidopsis thaliana emb CAA19766.1  (AL031004) putative protein [Arabidopsis thaliana] emb CAB79875.1  (AL161579) putative protein [Arabidopsis thaliana]	8.3
3569	118965	gi 118965 sp P23098 DYHC_TRIGR DYNEIN BETA CHAIN, CILIARY pir S17653 dynein beta heavy chain, ciliary - sea urchin (Tripneustes gratilla) emb CAA42170.1  (X59603) Beta heavy chain of outer-arm axonemal dynein ATPase [Tripneustes gratilla] prf 1714372A dynein:SUBUNIT=beta heavy chain [Tripneustes gratilla]	7.7
3571	7662078	gi 7662078 ref NP_055454.1  KIAA0372 gene product [Homo sapiens] dbj BAA20827.1  (AB002370) KIAA0372 [Homo sapiens]	5E-65

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
3576	5803098	gi 5803098 ref NP_006757.1  zinc finger protein 220; Monocytic leukemia zinc finger protein [Homo sapiens] sp Q92794 MOZ_HUMAN MONOCYTIC LEUKEMIA ZINC FINGER PROTEIN (ZINC FINGER PROTEIN 220) gb AAC50662.1  (U47742) monocytic leukaemia zinc finger protein [Homo sapiens]	4.6
3582	9964384	gi 9964384 ref NP_064852.1  AMV070 [Amsacta moorei entomopoxvirus] gb AAG02776.1 AF250284_70 (AF250284) AMV070 [Amsacta moorei entomopoxvirus]	9
3583	13272342	gi 13272342 gb AAK17105.1 AF291051_2 (AF291051) ATP synthase subunit a [Candidatus Carsonella ruddii]	1.3
3586	7505649	gi 7505649 pir T28783 hypothetical protein K09E10.1 - Caenorhabditis elegans gb AAC48044.1  (AF003149) Hypothetical protein K09E10.1 [Caenorhabditis elegans]	2.9
3587	2981631	gi 2981631 dbj BAA25253.1  (AB012223) ORF2 [Canis familiaris]	0.98
3590	6018210	gi 6018210 gb AAF01791.1  (AF143853) 82 kD heat shock protein [Moniliformis moniliformis]	0.15
3593	7160719	gi 7160719 emb CAA88053.2  (Z48007) contains similarity to Pfam domain: PF00069 (Eukaryotic protein kinase domain), Score=49.7, E-value=3.4e-13, N=3; PF00211 (Adenylate and Guanylate cyclase catalytic domain), Score=325.1, E-value=2.5e-94, N=1; PF01094 (Receptor family ligand bi>	4.3
3599	7470593	gi 7470593 pir S75491 hypothetical protein slr2115 - Synechocystis sp. (strain PCC 6803) dbj BAA18052.1  (D90911) ORF_ID:slr2115~unknown protein [Synechocystis sp. PCC 6803]	5.5
3600	1334398	gi 1334398 emb CAA33190.1  (X15081) MURF2 protein (AA 1-348) [Crithidia fasciculata]	2.2

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
3602	118965	gi 118965 sp P23098 DYHC_TRIGR DYNEIN BETA CHAIN, CILIARY pir S17653 dynein beta heavy chain, ciliary - sea urchin ( <i>Tripneustes gratilla</i> ) emb CAA42170.1  (X59603) Beta heavy chain of outer-arm axonemal dynein ATPase [ <i>Tripneustes gratilla</i> ] prf 1714372A dynein:SUBUNIT=beta heavy chain [ <i>Tripneustes gratilla</i> ]	9.8
3603	14578630	gi 14578630 gb AAK68919.1 AF189282_9 (AF189282) putative glycosyltransferase [ <i>Bacteroides fragilis</i> ]	0.29
3606	14318569	gi 14318569 ref NP_116702.1  Yfr044cp [ <i>Saccharomyces cerevisiae</i> ] sp P43616 YFL4_YEAST HYPOTHETICAL 52.9 KD PROTEIN IN SAP155-YMR31 INTERGENIC REGION pir S56299 hypothetical protein YFR044c - yeast ( <i>Saccharomyces cerevisiae</i> ) dbj BAA09283.1  (D50617) YFR044C [ <i>Saccharomyces cerevisiae</i> ]	3
3609	10581847	gi 10581847 gb AAG20525.1  (AE005124) Vng2444c [ <i>Halobacterium</i> sp. NRC-1]	4.5
3616	1363925	gi 1363925 pir S57662 hypothetical protein 2 - North American opossum (fragment) emb CAA88817.1  (Z48955) ORF-2, putative RT [ <i>Didelphis virginiana</i> ]	3.6
3618	1808609	gi 1808609 emb CAA64091.1  (X94355) D6L [Cowpox virus] emb CAA72556.1  (Y11842) C6L [Cowpox virus]	9.6
3619	14775653	gi 14775653 ref XP_045559.1  similar to KIAA0565 gene product ( <i>H. sapiens</i> ) [ <i>Homo sapiens</i> ]	4.7
3621	7475003	gi 7475003 pir G69801 hypothetical protein yfhO - <i>Bacillus subtilis</i> emb CAB12689.1  (Z99108) yfhO [ <i>Bacillus subtilis</i> ] dbj BAA24481.1  (D85082) YfhO [ <i>Bacillus subtilis</i> ]	8.1
3626	5902895	gi 5902895 dbj BAA84478.1  (AB032367) type I polyketide synthase AVES 3 [ <i>Streptomyces avermitilis</i> ]	4.3
3627	7444049	gi 7444049 pir F72275 phosphate regulon transcription regulator PhoB - <i>Thermotoga maritima</i> (strain MSB8) gb AAD36333.1 AE001781_4 (AE001781) phosphate regulon transcriptional regulatory protein PhoB [ <i>Thermotoga maritima</i> ]	2.8

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
3630	7507776	gi 7507776 pir T16867 probable cytochrome P450 T13C5.1 [similarity] - <i>Caenorhabditis elegans</i>	1.6
3632	11360480	gi 11360480 pir H82745 acyl-[ACP]-UDP-N-acetylglucosamine XF0918 [imported] - <i>Xylella fastidiosa</i> (strain 9a5c) gb AAF83728.1 AE003931_5 (AE003931) acyl-[ACP]-UDP-N-acetylglucosamine [ <i>Xylella fastidiosa</i> 9a5c]	1.3
3633	13873167	gi 13873167 gb AAK43406.1  (AF196891) polygalacturonase inhibitor protein [ <i>Fragaria vesca</i> ] gb AAK43407.1  (AF196892) polygalacturonase inhibitor protein [ <i>Fragaria vesca</i> ] gb AAK43408.1  (AF196893) polygalacturonase inhibitor protein [ <i>Fragaria vesca</i> ]	3.7
3636	10946710	gi 10946710 ref NP_067350.1  Rhesus blood group-associated B glycoprotein; Rh type B glycoprotein [ <i>Mus musculus</i> ] gb AAF19371.1  (AF193808) Rh type B glycoprotein [ <i>Mus musculus</i> ]	4.9
3638	7447412	gi 7447412 pir T06201 xyloglucan endo-1,4-beta-D-glucanase (EC 3.2.1.-) - barley emb CAA63662.1  (X93174) xyloglucan endotransglycosylase (XET) [ <i>Hordeum vulgare</i> ]	5.5
3639	12620601	gi 12620601 gb AAG60877.1 AF322012_182 (AF322013) ID409 [ <i>Bradyrhizobium japonicum</i> ]	6.4
3640	1175418	gi 1175418 sp Q09743 ST16_SCHPO STE16 PROTEIN pir T39379 sexual differentiation and meiosis protein ste20 - fission yeast ( <i>Schizosaccharomyces pombe</i> ) emb CAA90815.1  (Z54140) required for sexual differentiation and meiosis [ <i>Schizosaccharomyces pombe</i> ] emb CAA11758.1  (AJ223984) Ste20 protein [ <i>Schizosaccharomyces pombe</i> ]	4.6
3641	1172876	gi 1172876 sp P35906 RDS_FELCA PERIPHERIN (RETINAL DEGENERATION SLOW PROTEIN) pir I46087 peripherin - cat gb AAA19175.1  (M94047) peripherin [ <i>Felis catus</i> ]	5.1
3643	825671	gi 825671 emb CAA34809.1  (X16934) B23 nucleophosmin (280 AA) [ <i>Homo sapiens</i> ]	2E-10
3645	2388576	gi 2388576 gb AAB71457.1  (AC000098) YUP8H12.17 [ <i>Arabidopsis thaliana</i> ]	3.7

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
3648	7498664	gi 7498664 pir T20598 hypothetical protein F08G2.4 - <i>Caenorhabditis elegans</i> emb CAB04058.1  (Z81495) predicted using Genefinder~cDNA EST yk401a9.3 comes from this gene~cDNA EST yk401a9.5 comes from this gene~cDNA EST yk523d8.3 comes from this gene~cDNA EST yk523d8.5 comes from this gene [Caenorhabditis elegans] gb AAG50226.1 AF303268_1 (AF303268) 20123 [Caenorhabditis elegans]	9.4
3654	225992	gi 225992 prf 1405326A GLI gene [Homo sapiens]	3.2
3657	422532	gi 422532 pir A45407 collagen alpha 3(IV) chain - sea urchin ( <i>Strongylocentrotus purpuratus</i> )	0.94
3658	14149807	gi 14149807 ref NP_115517.1  hypothetical protein DKFZp434K1421 [Homo sapiens] emb CAB66740.1  (AL136806) hypothetical protein [Homo sapiens]	4E-65
3665	134872	gi 134872 sp P13666 SRCA_RABIT SARCALUMENIN PRECURSOR gb AAA31189.1  (M25750) sarcolumenin precursor [ <i>Oryctolagus cuniculus</i> ]	8.1
3670	14734955	gi 14734955 ref XP_046758.1  tensin [Homo sapiens]	0.47
3675	14742385	gi 14742385 ref XP_046349.1  33219 [Homo sapiens]	2.1
3676	2197085	gi 2197085 gb AAD04635.1  (AF003535) ORF2-like protein [Homo sapiens]	0.14
3690	1711034	gi 1711034 gb AAB38323.1  (U78953) basic helix-loop-helix DNA binding protein HLH-3 [ <i>Caenorhabditis elegans</i> ]	5.4
3692	2072964	gi 2072964 gb AAC51271.1  (U93569) putative p150 [Homo sapiens]	0.15
3693	1857258	gi 1857258 gb AAB48409.1  (U75538) putative viral polymerase [tobacco streak virus]	5.3
3694	8573079	gi 8573079 ref NP_059567.1  NADH dehydrogenase subunit 1 [ <i>Sciurus vulgaris</i> ] emb CAB93985.1  (AJ238588) NADH dehydrogenase subunit 1 [ <i>Sciurus vulgaris</i> ]	3E-15
3699	12654875	gi 12654875 gb AAH01281.1 AAH01281 (BC001281) tumor necrosis factor receptor superfamily, member 10b [Homo sapiens]	7.9
3704	2961586	gi 2961586 gb AAC05758.1  (AF051294) NADH dehydrogenase subunit 1 [ <i>Dalbulus gelbus</i> ]	4.3

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
3707	1504016	gi 1504016 dbj BAA13207.1  (D86971) no similarities to reported gene products [Homo sapiens]	6E-11
3709	11466493	gi 11466493 ref NP_038196.1  cytochrome c oxidase subunit 3 [Chrysodidymus synuroideus] gb AAF36962.1 AF222718_36 (AF222718) cytochrome c oxidase subunit 3 [Chrysodidymus synuroideus]	5.7
3710	14089788	gi 14089788 emb CAC13547.1  (AL445564) LIPOPROTEIN [Mycoplasma pulmonis]	2.4
3724	8978260	gi 8978260 dbj BAA98151.1  (AB025612) CLP protease regulatory subunit CLPX-like [Arabidopsis thaliana]	5.4
3727	14748431	gi 14748431 ref XP_018068.2  hypothetical protein MGC3199 [Homo sapiens]	0.000009
3734	10727054	gi 10727054 gb AAF46943.2  (AE003459) CG3037 gene product [Drosophila melanogaster]	3.8
3735	6323629	gi 6323629 ref NP_013700.1  Yml013c-ap [Saccharomyces cerevisiae] pir S69871 hypothetical protein YML012c-a - yeast (Saccharomyces cerevisiae)	9
3736	4502081	gi 4502081 ref NP_001626.1  amphiphysin; amphiphysin (Stiff-Man syndrome with breast cancer 128kD autoantigen) [Homo sapiens] ref XP_035768.1  amphiphysin [Homo sapiens] ref XP_035767.1  amphiphysin [Homo sapiens] sp P49418 AMPH_HUMAN AMPHIPHYSIN pir S62400 amphiphysin (clone 22-2) - human gb AAA21865.1  (U07616) amphiphysin [Homo sapiens] emb CAA57197.1  (X81438) amphiphysin [Homo sapiens]	0.61
3741	7492913	gi 7492913 pir T40695 probable ribosomal protein precursor, mitochondrial - fission yeast (Schizosaccharomyces pombe) emb CAB36868.1  (AL035536) mitochondrial ribosomal protein L36 [Schizosaccharomyces pombe]	6.7
3743	1168945	gi 1168945 sp P30572 CHS2_CANAL CHITIN SYNTHASE 2 (CHITIN-UDP ACETYL-GLUCOSAMINYL TRANSFERASE 2) gb AAB59308.2  (M82937) chitin synthase 2 [Candida albicans]	1.2

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
3745	12722927	gi 12722927 gb AAK04181.1 AE006247_3 (AE006247) UNKNOWN PROTEIN [Lactococcus lactis subsp. lactis]	2.9
3747	6090792	gi 6090792 gb AAF03328.1  (AF101747) olfactory receptor [Pan paniscus]	4.1
3750	12846356	gi 12846356 dbj BAB27137.1  (AK010713) putative [Mus musculus]	0.000000004
3754	4240279	gi 4240279 dbj BAA74918.1  (AB020702) KIAA0895 protein [Homo sapiens]	10
3755	543715	gi 543715 sp P36875 2AAA_PEA PROTEIN PHOSPHATASE PP2A REGULATORY SUBUNIT A (PR65) pir S40171 phosphoprotein phosphatase 2A 65kDa regulatory chain - garden pea (fragment) pir S43776 phosphoprotein phosphatase 2A 65kDa regulatory subunit - garden pea (fragment) emb CAA81107.1  (Z25888) phosphoprotein phosphatase 2A 65kDa regulatory subunit [Pisum sativum]	6E-12
3756	11353649	gi 11353649 pir D81094 hypothetical protein NMB1340 [imported] - Neisseria meningitidis (group B strain MD58) gb AAF41715.1  (AE002482) hypothetical protein [Neisseria meningitidis MC58]	3.4
3761	11276053	gi 11276053 gb AAG33872.1 AF319939_1 (AF319939) enhancin [Choristoneura fumiferana granulovirus]	4.3
3763	13812312	gi 13812312 ref NP_113430.1  40S ribosomal protein SSA [Guillardia theta] emb CAC26999.1  (AJ010592) 40S ribosomal protein SSA [Guillardia theta]	9.3
3764	4115943	gi 4115943 gb AAD03453.1  (AF118223) contains similarity to eukaryotic protein kinase domains (Pfam: PF00069, score=312.6, E=4.7e-90, N=1) and EF hand domains (Pfam: PF00036, score=131, E=2.1e-35, N=4) [Arabidopsis thaliana] emb CAB80837.1  (AL161501) putative calcium dependent protein kinase [Arabidopsis thaliana]	1.2
3765	7494381	gi 7494381 pir H71613 probable multiple transmembrane domain protein PFB0475c - malaria parasite (Plasmodium falciparum) gb AAC71884.1  (AE001397) predicted multiple transmembrane domain protein [Plasmodium falciparum]	8.5



Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
3768	3930075	gi 3930075 gb AAC82262.1  (U81928) envelope glycoprotein [Human immunodeficiency virus type 1]	2.5
3769	4493896	gi 4493896 emb CAB39005.1  (AL034558) predicted using hexExon; MAL3P2.18 (PFC0245c), Hypothetical protein, len: 3934 aa [Plasmodium falciparum]	9.2
3770	14193274	gi 14193274 gb AAK55866.1 AF267203_2 (AF267203) ATP synthase gamma subunit [Candidatus Carsonella ruddii]	6.3
3771	11499055	gi 11499055 ref NP_070289.1  hypothetical protein [Archaeoglobus fulgidus] sp O28812 YE60_ARCFU HYPOTHETICAL PROTEIN AF1460 pir C69432 hypothetical protein AF1460 - Archaeoglobus fulgidus gb AAB89791.1  (AE001002) A. fulgidus predicted coding region AF1460 [Archaeoglobus fulgidus]	5.9
3773	7301453	gi 7301453 gb AAF56578.1  (AE003755) CG12290 gene product [Drosophila melanogaster]	9.3
3777	11467606	gi 11467606 ref NP_050068.1  NH2 terminus uncertain [Leishmania tarentolae] pir B26696 hypothetical protein 1 (CYb-COII intergenic region) - Leishmania tarentolae mitochondrion (fragment) gb AAA96601.1  (M10126) NH2 terminus uncertain [Leishmania tarentolae]	0.4
3780	7507710	gi 7507710 pir T23023 hypothetical protein T12A7.5 - Caenorhabditis elegans emb CAB07423.1  (Z92847) cDNA EST yk26a3.5 comes from this gene~cDNA EST yk29g7.5 comes from this gene~cDNA EST yk29g8.5 comes from this gene~cDNA EST yk50c8.5 comes from this gene~cDNA EST yk52f12.5 comes from this gene~cDNA EST yk53c1.5 comes from this gene~cDNA EST> emb CAA98143.1  (Z73911) cDNA EST yk26a3.5 comes from this gene~cDNA EST yk29g7.5 comes from this gene~cDNA EST yk29g8.5 comes from this gene~cDNA EST yk50c8.5 comes from this gene~cDNA EST yk52f12.5 comes from this gene~cDNA EST yk53c1.5 comes from this gene~cDNA EST>	2.6

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
3783	13994312	gi 13994312 ref NP_114137.1  testis transcript Y 13 [Homo sapiens] ref XP_040549.1  testis transcript Y 13 [Homo sapiens] gb AAK13492.1 AF332242_1 (AF332242) transcript Y 13 [Homo sapiens]	2.6
3786	1169093	gi 1169093 sp P45815 CRF1_YARLI COPPER RESISTANCE PROTEIN CRF1 emb CAA80803.1  (Z23265) Product required for copper resistance [Yarrowia lipolytica]	7.1
3787	3599476	gi 3599476 gb AAC69336.1  (AF084637) serendipity alpha protein [Drosophila virilis]	2.5
3793	14728817	gi 14728817 ref XP_047357.1  KIAA0342 gene product [Homo sapiens]	9.5
3795	11281706	gi 11281706 pir B81937 competence protein NMA0906 [imported] - Neisseria meningitidis (group A strain Z2491) emb CAB84183.1  (AL162754) competence protein [Neisseria meningitidis Z2491]	5.5
3797	11096149	gi 11096149 gb AAG30214.1 AF296334_1 (AF296334) collagen-like surface protein [Streptococcus pyogenes]	2.4
3798	1827933	gi 1827933 pdb 1PCA  Procarboxypeptidase A (E.C.3.4.12.2)	1.3
3800	6320364	gi 6320364 ref NP_010444.1  regulator of transporters; Ssy1p [Saccharomyces cerevisiae] sp Q03770 SSY1_YEAST PUTATIVE AMINO-ACID PERMEASE SSY1 pir S57984 probable membrane protein YDR160w - yeast (Saccharomyces cerevisiae) emb CAA90380.1  (Z50046) unknown [Saccharomyces cerevisiae]	0.92
3803	14973521	gi 14973521 gb AAK76078.1  (AE007490) ribosomal large subunit pseudouridine synthase, RluD subfamily [Streptococcus pneumoniae]	7.4
3807	10834955	gi 10834955 ref NP_066916.1  ICP4 protein [Gallid herpesvirus 3] dbj BAB16594.1  (AB049735) ICP4 protein [Gallid herpesvirus 3]	1.6
3817	13430085	gi 13430085 gb AAK25738.1 AF291747_1 (AF291747) zinc-finger transcription factor KROX20 [Gallus gallus]	0.63
3822	7462422	gi 7462422 pir A72258 hypothetical protein - Thermotoga maritima (strain MSB8) gb AAD36479.1 AE001793_9 (AE001793) hypothetical protein [Thermotoga maritima]	9.7

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
3828	7517565	gi 7517565 pir A70328 hypothetical protein aq_311 - Aquifex aeolicus gb AAC06616.1  (AE000683) putative protein [Aquifex aeolicus]	3.7
3830	3924618	gi 3924618 gb AAC79121.1  (U88902) putative envelope protein [Homo sapiens]	0.0000006
3835	7023029	gi 7023029 dbj BAA91807.1  (AK001647) unnamed protein product [Homo sapiens]	4E-80
3836	12698001	gi 12698001 dbj BAB21819.1  (AB051515) KIAA1728 protein [Homo sapiens]	0.0004
3837	5281354	gi 5281354 gb AAD41491.1 AF136456_1 (AF136456) transcription factor Tcf3b [Danio rerio]	5
3838	9628045	gi 9628045 ref NP_042639.1  ORF 42 [Equine herpesvirus 2] pir S55637 hypothetical protein 42 - equine herpesvirus 2 gb AAC13830.1  (U20824) ORF 42 [Equine herpesvirus 2]	7.1
3839	9964462	gi 9964462 ref NP_064930.1  AMV148 [Amsacta moorei entomopoxvirus] gb AAG02854.1 AF250284_148 (AF250284) AMV148 [Amsacta moorei entomopoxvirus]	5.8
3844	13357611	gi 13357611 ref NP_077885.1  membrane nuclease A - hypothetical [Ureaplasma urealyticum] pir A82939 membrane nuclease A, hypothetical UU055 [imported] - Ureaplasma urealyticum gb AAF30460.1 AE002105_1 (AE002105) membrane nuclease A - hypothetical [Ureaplasma urealyticum]	2.9
3845	2425188	gi 2425188 dbj BAA22281.1  (AB007035) FGF receptor 3 [Xenopus laevis]	2.5
3848	11351069	gi 11351069 pir H83232 probable ATP-dependent helicase PA3297 [imported] - Pseudomonas aeruginosa (strain PAO1) gb AAG06685.1 AE004752_1 (AE004752) probable ATP-dependent helicase [Pseudomonas aeruginosa]	4.2
3850	7141304	gi 7141304 gb AAF37281.1  (AF225702) RSH1 [Arabidopsis thaliana]	9.3
3852	11352313	gi 11352313 pir G83376 probable trehalose synthase PA2152 [imported] - Pseudomonas aeruginosa (strain PAO1) gb AAG05540.1 AE004642_7 (AE004642) probable trehalose synthase [Pseudomonas aeruginosa]	3

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
3856	9453863	gi 9453863 dbj BAB03284.1  (AB037278) complement C4A [ <i>Cyprinus carpio</i> ]	5.5
3859	11466282	gi 11466282 ref NP_049597.1  orf1386 [ <i>Tetrahymena pyriformis</i> ] gb AAD41942.1 AF160864_30 (AF160864) orf1386 [ <i>Tetrahymena pyriformis</i> ]	7.5
3861	9626695	gi 9626695 ref NP_040967.1  overlapping out-of-phase protein [ <i>Eggplant mosaic virus</i> ] sp P20129 V70K_EPMV 70 KD PROTEIN gb AAA43038.1  (J04374) overlapping out-of-phase protein [ <i>Eggplant mosaic virus</i> ]	5.6
3862	7473683	gi 7473683 pir H75456 probable succinate dehydrogenase, hydrophobic subunit SdhD - <i>Deinococcus radiodurans</i> (strain R1) gb AAF10526.1 AE001947_9 (AE001947) succinate dehydrogenase, hydrophobic subunit SdhD, putative [ <i>Deinococcus radiodurans</i> ]	5.2
3864	11359953	gi 11359953 pir T46330 hypothetical protein DKFZp434D0513.1 - human (fragment) emb CAB70660.1  (AL137259) hypothetical protein [ <i>Homo sapiens</i> ]	6E-28
3867	3056600	gi 3056600 gb AAC13911.1 AAC13911 (AC004255) T1F9.21 [ <i>Arabidopsis thaliana</i> ]	5.5
3872	11358605	gi 11358605 pir T49882 pectin methyl-esterase-like protein - <i>Arabidopsis thaliana</i> emb CAB87932.1  (AL163912) pectin methyl-esterase-like protein [ <i>Arabidopsis thaliana</i> ]	3.9
3873	5917666	gi 5917666 gb AAD55980.1 AF159297_1 (AF159297) extensin-like protein [ <i>Zea mays</i> ]	9.2
3879	15011489	gi 15011489 gb AAK77584.1 AF396436_24 (AF396436) heme maturase [ <i>Tetrahymena thermophila</i> ]	3
3880	5835877	gi 5835877 ref NP_008647.1 ND2_15072 NADH dehydrogenase subunit 2 [ <i>Ceratitis capitata</i> ] emb CAB45088.1  (AJ242872) NADH dehydrogenase (ubiquinone) chain 2 [ <i>Ceratitis capitata</i> ]	0.85

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
3881	10956089	gi 10956089 ref NP_052581.1  Orf2 [Pediococcus pentosaceus] ref NP_037562.1  mobilization protein [Pediococcus pentosaceus] gb AAD25894.1 AF069302_2 (AF069302) Orf2 [Pediococcus pentosaceus] gb AAD39619.1 AF033858_2 (AF033858) mobilization protein [Pediococcus pentosaceus]	5.5
3883	9294238	gi 9294238 dbj BAB02140.1  (AP000411) contains similarity to reverse transcriptase~gene_id:K11J14.5 [Arabidopsis thaliana]	6.3
3885	975667	gi 975667 emb CAA61500.1  (X89213) RNA polymerase [Infectious hematopoietic necrosis virus] prf 2121413F RNA polymerase [Infectious hematopoietic necrosis virus]	4.3
3886	138293	gi 138293 sp P23041 VGLG_HRSV8 MAJOR SURFACE GLYCOPROTEIN G (ATTACHMENT GLYCOPROTEIN G) pir  MGNZ60 major surface glycoprotein G - human respiratory syncytial virus (strain 8/60) gb AAA47408.1  (M73545) attachment protein [Human respiratory syncytial virus] gb AAA47413.1  (M55633) attachment glycoprotein [Human respiratory syncytial virus]	2.1
3888	9628729	gi 9628729 ref NP_043760.1  U4 [Human herpesvirus 7] sp P52521 VU4_HSV7J U4 PROTEIN pir  T41908 hypothetical protein U4 - human herpesvirus 7 (strain JI) gb AAC54668.1  (U43400) U4 gene product [Human herpesvirus 7] gb AAC40722.1  (AF037218) U4 [Human herpesvirus 7]	0.77
3891	13376093	gi 13376093 ref NP_079033.1  hypothetical protein FLJ12879 [Homo sapiens] dbj BAB14321.1  (AK022941) unnamed protein product [Homo sapiens]	6.5
3892	7508715	gi 7508715 pir  T26003 hypothetical protein VC27A7L.1 - Caenorhabditis elegans emb CAB09130.1  (Z95621) contains similarity to Pfam domain: PF01461 (7TM chemoreceptor), Score=-47.3, E-value=1.9e-12, N=1 [Caenorhabditis elegans]	4.7
3893	2961421	gi 2961421 dbj BAA25153.1  (AB011027) Pns10-2 [oat sterile dwarf virus]	7.5

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
3899	11276053	gi 11276053 gb AAG33872.1 AF319939_1 (AF319939) enhancin [Choristoneura fumiferana granulovirus]	3.7
3904	10177870	gi 10177870 dbj BAB11240.1  (AB010074) potassium/proton antiporter-like protein [Arabidopsis thaliana]	2.7
3907	9629709	gi 9629709 ref NP_045001.1  methyltransferase (MT) and helicase (HEL) domains [Little cherry closterovirus] emb CAA71285.1  (Y10237) methyltransferase (MT) and helicase (HEL) domains [Little cherry closterovirus]	4.1
3908	14756677	gi 14756677 ref XP_040326.1  absent in melanoma 1 [Homo sapiens]	0.96
3911	9630708	gi 9630708 ref NP_047255.1  gag-pol precursor polyprotein gPr80 [Feline leukemia virus] gb AAC31801.1  (AF052723) gag-pol precursor polyprotein gPr80 [Feline leukemia virus]	0.021
3913	91039	gi 91039 pir S04847 leukocyte adhesion protein CD18 precursor - mouse emb CAA33077.1  (X14951) CD18 antigen preprotein [Mus musculus]	4.6
3916	5107943	gi 5107943 gb AAD40185.1 AF157488_1 (AF157488) 36DE accessory gland protein [Drosophila melanogaster] gb AAF53664.1  (AE003658) Acp36DE gene product [Drosophila melanogaster]	5.8
3919	4809000	gi 4809000 gb AAD30054.1  (AF133052) pol polyprotein [walleye epidermal hyperplasia virus type 2]	0.000004
3920	7262603	gi 7262603 gb AAF43901.1 AF162134_1 (AF162134) immunoglobulin epsilon heavy chain constant region [Felis catus]	8.9
3927	12963481	gi 12963481 ref NP_061927.1  hypothetical protein MGC5560; hypothetical protein [Homo sapiens] dbj BAB14342.1  (AK022978) unnamed protein product [Homo sapiens]	2E-66
3929	13651251	gi 13651251 ref XP_017240.1  15060 [Homo sapiens]	0.00000003
3930	11466329	gi 11466329 ref NP_051157.1  ATP synthase F0 subunit 6 [Cafeteria roenbergensis] gb AAF05808.1 AF193903_31 (AF193903) ATP synthase F0 subunit 6 [Cafeteria roenbergensis]	8.3

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
3933	7452186	gi 7452186 pir S75936 hypothetical protein slr0023 - Synechocystis sp. (strain PCC 6803) dbj BAA10783.1  (D64006) ORF_ID:slr0023~unknown protein [Synechocystis sp. PCC 6803]	7.7
3935	12720861	gi 12720861 gb AAK02675.1  (AE006095) unknown [Pasteurella multocida]	1.2
3937	8919178	gi 8919178 emb CAB96077.1  (AJ277244) alpha-glucosidase [Solanum tuberosum subsp. tuberosum]	5.7
3938	12830385	gi 12830385 emb CAC29069.1  (AJ408289) immunoglobulin lambda light chain variable region [Homo sapiens]	2.1
3942	13385576	gi 13385576 ref NP_080353.1  RIKEN cDNA 3110040N11 gene [Mus musculus] dbj BAB29184.1  (AK014163) putative [Mus musculus] dbj BAB31031.1  (AK018003) putative [Mus musculus] dbj BAB31634.1  (AK019261) putative [Mus musculus]	5E-48
3945	13476785	gi 13476785 ref NP_108354.1  transcription regulator [Mesorhizobium loti] dbj BAB53815.1  (AP003013) transcription regulator [Mesorhizobium loti]	5.6
3947	13357649	gi 13357649 ref NP_077923.1  unique hypothetical membrane lipoprotein [Ureaplasma urealyticum] pir E82934 hypothetical protein UU092 [imported] - Ureaplasma urealyticum gb AAF30498.1 AE002109_1 (AE002109) unique hypothetical membrane lipoprotein [Ureaplasma urealyticum]	4.1
3951	13358144	gi 13358144 ref NP_078418.1  conserved hypothetical membrane lipoprotein [Ureaplasma urealyticum] pir G82873 conserved hypothetical membrane lipoprotein UU579 [imported] - Ureaplasma urealyticum gb AAF30993.1 AE002156_8 (AE002156) conserved hypothetical membrane lipoprotein [Ureaplasma urealyticum]	8.1
3956	7299437	gi 7299437 gb AAF54626.1  (AE003691) KP78b gene product [Drosophila melanogaster]	5.5
3961	6729023	gi 6729023 gb AAF27019.1 AC009177_9 (AC009177) hypothetical protein [Arabidopsis thaliana]	9.8

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
3962	2645329	gi 2645329 gb AAB87213.1  (U83821) NADH dehydrogenase subunit 4 [Oryzomys palustris]	6.6
3965	11280919	gi 11280919 pir T46939 hypothetical protein 1 [imported] - Agrobacterium tumefaciens plasmid pAtK84b gb AAD31598.1 AF065244_2 (AF065244) unknown [Agrobacterium tumefaciens]	0.33
3966	7305249	gi 7305249 ref NP_038748.1  MAX-interacting protein [Mus musculus] gb AAF24761.1  (AF205935) MGA protein [Mus musculus]	3E-51
3969	5901753	gi 5901753 gb AAD55397.1  (AF177905) hypothetical protein [Candida glabrata]	1.6
3973	9635492	gi 9635492 ref NP_059583.1  gtrA [Enterobacteria phage P22] sp P57021 GTRA_BPP22 BACTOPRENOL-LINKED GLUCOSE TRANSLOCASE gb AAF75001.1  (AF217253) gtrA [Enterobacteria phage P22]	4
3975	2143428	gi 2143428 pir [I58123 aggrecan - mouse (fragment) gb AAB32159.1  (S73720) aggrecan=cmd(aggrecan) [mice, cmd/cmd, liver, Peptide Partial Mutant, 112 aa] [Mus sp.]	3.3
3979	14767565	gi 14767565 ref XP_027089.1  N-acetylated alpha-linked acidic dipeptidase 2 [Homo sapiens] emb CAB39967.1  (AJ012370) NAALADase II protein [Homo sapiens]	1.3
3980	11359267	gi 11359267 pir T50192 probable pseudouridylate synthase [imported] - fission yeast (Schizosaccharomyces pombe) emb CAB61771.1  (AL133225) probable pseudouridylate synthase [Schizosaccharomyces pombe]	1.7
3982	13652498	gi 13652498 ref XP_007053.3  tubby like protein 3 [Homo sapiens] ref XP_045148.1  8937 [Homo sapiens]	5.1
3983	9978891	gi 9978891 sp P57059 SN1L_HUMAN PROBABLE SERINE/THREONINE PROTEIN KINASE SNF1LK dbj BAA95536.1  (AP001751) gene similar to rat protein kinase (KID2) [Homo sapiens]	1.6
3986	7448436	gi 7448436 pir E71674 hypothetical protein RP682 - Rickettsia prowazekii emb CAA15119.1  (AJ235272) unknown [Rickettsia prowazekii]	2.2
3987	13815874	gi 13815874 gb AAK42697.1  (AE006854) Hypothetical protein [Sulfolobus solfataricus]	3.8



Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
3989	7485330	gi 7485330 pir T04802 hypothetical protein F10M23.130 - Arabidopsis thaliana emb CAB36525.1  (AL035440) putative APG protein [Arabidopsis thaliana] emb CAB79534.1  (AL161565) putative APG protein [Arabidopsis thaliana]	4.5
3991	7295073	gi 7295073 gb AAF50399.1  (AE003555) Talin gene product [Drosophila melanogaster] gb AAG22814.1  (AF299248) talin [Drosophila melanogaster]	3.8
3992	14456133	gi 14456133 emb CAC41650.1  (AJ315577) putative nitrate reductase [Ustilago maydis]	8
3993	533179	gi 533179 gb AAA56944.1  (L33090) pol protein [Human immunodeficiency virus type 2]	7.4
3996	14250408	gi 14250408 gb AAH08638.1 AAH08638 (BC008638) Similar to aspartyl-tRNA synthetase [Mus musculus]	4.1
4000	14775307	gi 14775307 ref XP_042250.1  similar to nuclear pore complex interacting protein (H. sapiens) [Homo sapiens]	3.5
4002	7507695	gi 7507695 pir T24847 hypothetical protein T11G6.7 - Caenorhabditis elegans emb CAA93415.1  (Z69384) predicted using Genefinder [Caenorhabditis elegans]	8.3
4008	1173359	gi 1173359 sp P45287 SAPC_HAEIN PEPTIDE TRANSPORT SYSTEM PERMEASE PROTEIN SAPC pir C64134 sapC protein homolog - Haemophilus influenzae (strain Rd KW20) gb AAC23287.1  (U32837) peptide ABC transporter, permease protein (sapC) [Haemophilus influenzae Rd]	0.83
4009	13385538	gi 13385538 ref NP_080316.1  RIKEN cDNA 2810036K01 gene [Mus musculus] dbj BAB28520.1  (AK012865) putative [Mus musculus]	1E-41
4011	13639013	gi 13639013 ref XP_012007.2  dual specificity phosphatase 8 [Homo sapiens]	9.1
4015	1079359	gi 1079359 pir JC2394 phospholipase A2 inhibitor 25K chain - monocled cobra gb AAB32583.1  phospholipase A2 25 kda subunit, PLA2 25 kda subunit=urokinase-type plasminogen activator receptor homolog [Naja naja kaouthia=Thailand cobras, blood, Peptide, 185 aa]	5

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
4016	284079	gi 284079 pir E41925 hypothetical protein 3 - human gb AAA58464.1  (M69297) ORF 3 [Homo sapiens]	0.005
4017	7293601	gi 7293601 gb AAF48973.1  (AE003512) CG14217 gene product [Drosophila melanogaster]	2.9
4020	11352313	gi 11352313 pir G83376 probable trehalose synthase PA2152 [imported] - Pseudomonas aeruginosa (strain PAO1) gb AAG05540.1 AE004642_7 (AE004642) probable trehalose synthase [Pseudomonas aeruginosa]	2.9
4023	11386701	gi 11386701 sp Q9V773 C6AK_DROME PROBABLE CYTOCHROME P450 6A20 (CYPVIA20)	9
4030	7332064	gi 7332064 gb AAF60751.1  (AC006801) contains similarity to Loligo pealei microtubule-associated protein H1 (PIR:S28831) [Caenorhabditis elegans]	1.7
4034	13242494	gi 13242494 ref NP_077507.1  EsV-1-22 [Ectocarpus siliculosus virus]	1.6
4035	7522108	gi 7522108 pir T29097 pro-pol-dUTPase polyprotein - murine endogenous retrovirus ERV-L (fragment) emb CAA73251.1  (Y12713) protease; reverse transcriptase; RNaseH; integrase; dUTPase; Pro-Pol-dUTPase polyprotein [Mus musculus]	0.025
4042	12045115	gi 12045115 ref NP_072926.1  lipoprotein, putative [Mycoplasma genitalium] sp P47502 Y260_MYCGE HYPOTHETICAL LIPOPROTEIN MG260 PRECURSOR pir G64228 hypothetical protein homolog MG260 - Mycoplasma genitalium gb AAC71481.1  (U39705) lipoprotein, putative [Mycoplasma genitalium]	3.2
4044	14249544	gi 14249544 ref NP_116223.1  hypothetical protein FLJ14751 [Homo sapiens] dbj BAB55272.1  (AK027657) unnamed protein product [Homo sapiens]	0.27
4046	6474685	gi 6474685 dbj BAA87286.1  (AB027982) Protein kinase C-like 1 [Schizosaccharomyces pombe]	1.9
4049	1514669	gi 1514669 emb CAA87082.1  (Z46958) adenylyl cyclase [Xenopus laevis]	0.56
4050	1514669	gi 1514669 emb CAA87082.1  (Z46958) adenylyl cyclase [Xenopus laevis]	0.85

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
4051	2499547	gi 2499547 sp P77153 WZB_ECOLI PROBABLE LOW MOLECULAR WEIGHT PROTEIN-TYROSINE-PHOSPHATASE WZB pir D64972 probable protein-tyrosine-phosphatase (EC 3.1.3.48) wzb, low molecular weight - Escherichia coli gb AAC77834.1  (U38473) putative acid phosphatase [Escherichia coli] gb AAC75122.1  (AE000296) probable protein-tyrosine-phosphatase [Escherichia coli K12] gb AAG57121.1 AE005432_2 (AE005432) probable protein-tyrosine-phosphatase [Escherichia coli O157:H7 EDL933] dbj BAB36289.1  (AP002560) probable protein-tyrosine-phosphatase [Escherichia coli O157:H7]	2.8
4052	14916565	gi 14916565 sp Q9XHG2 FLS_MALDO FLAVONOL SYNTHASE (FLS) gb AAD26261.1 AF119095_1 (AF119095) flavonol synthase [Malus x domestica]	3.8
4053	3769667	gi 3769667 gb AAC64604.1  (AF093797) unknown [Norwalk virus]	2.8
4060	14335082	gi 14335082 gb AAK59820.1  (AY037220) AT4g24060/T19F6_50 [Arabidopsis thaliana]	1.3
4061	12838540	gi 12838540 dbj BAB24237.1  (AK005786) putative [Mus musculus]	4.3
4066	7549797	gi 7549797 ref NP_035731.1  T lymphoma oncogene [Mus musculus] sp P17408 TLM_MOUSE TLM PROTEIN (TLM ONCOGENE) pir S10151 transforming protein tlm - mouse (strain balb/c) emb CAA36859.1  (X52634) tlm protein [Mus musculus]	0.58
4067	11357726	gi 11357726 pir T51437 hypothetical protein F2G14_40 - Arabidopsis thaliana emb CAC01811.1  (AL391146) putative protein [Arabidopsis thaliana] gb AAK49610.1 AF372894_1 (AF372894) AT5g14920/F2G14_40 [Arabidopsis thaliana] gb AAK74054.1  (AY045696) AT5g14920/F2G14_40 [Arabidopsis thaliana]	1.8
4070	8218109	gi 8218109 emb CAB92762.1  (AL121883) dJ545K15.1.3 (novel protein similar to KIAA0512 (contains translation of cDNAs Em:AK000818 and Em:L20773) (isoform 3)) [Homo sapiens]	5.5

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
4072	13096854	gi 13096854 gb AAH03224.1 AAH03224 (BC003224) Similar to chromosome condensation 1-like [Mus musculus]	9.1
4073	103076	gi 103076 pir B21124 Bkm-like sex-determining region hypothetical protein CS314 - fruit fly (Drosophila melanogaster) (fragment)	0.3
4074	14722732	gi 14722732 ref XP_017441.2  hypothetical protein FLJ21477 [Homo sapiens]	6.6
4076	3378554	gi 3378554 emb CAA76192.1  (Y16404) multidrug resistance protein [Candida albicans]	0.33
4081	6983946	gi 6983946 gb AAF34740.1 AF200327_1 (AF200327) unknown [Plasmodium chabaudi]	8.5
4082	5524754	gi 5524754 emb CAB50786.1  (AJ011801) Rx protein [Solanum tuberosum]	2.6
4086	7959271	gi 7959271 dbj BAA96029.1  (AB040938) KIAA1505 protein [Homo sapiens]	3E-58
4087	130687	gi 130687 sp P27536 POST_XENLA POSTERIOR PROTEIN pir A43784 Xpo protein - African clawed frog emb CAA41397.1  (X58487) Xpo [Xenopus laevis]	1.2
4092	2406633	gi 2406633 gb AAB70469.1  (AF005630) adenylyl cyclase isoform DAC9 [Drosophila melanogaster]	7.3
4095	13812388	gi 13812388 ref NP_113506.1  cell division cycle 2 homolog [Guillardia theta] emb CAC27075.1  (AJ010592) cell division cycle 2 homolog [Guillardia theta]	9.7
4096	14530932	gi 14530932 gb AAG37978.2  (AC087081) Hypothetical protein Y82E9BL.13 [Caenorhabditis elegans]	3.1
4097	14760316	gi 14760316 ref XP_045601.1  7324 [Homo sapiens]	0.83
4098	7305361	gi 7305361 ref NP_038652.1  otogelin [Mus musculus] pir T42214 otogelin - mouse gb AAB96561.1  (U96411) otogelin; MLEMP [Mus musculus]	1E-10
4103	8953656	gi 8953656 emb CAB96704.1  (AL360354) vir15, rpg1, putative transmembrane protein, similar to rpg2, vir9 MW:34499 (294 aa), fasta scores: opt: 398, E0: 0.023, 26.0% identity in 289 aa overlap, and to vir2: MW:35019 (292 aa), fasta scores: opt: 380, E0: 0.037, 28.0% identity in>	3.6
4108	3659615	gi 3659615 gb AAC61684.1  (AF052517) diguanylate cyclase [Gluconacetobacter xylinus]	6.5

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
4110	11465871	gi 11465871 ref NP_066420.1  NADH dehydrogenase subunit 2 [Ochromonas danica] gb AAG18386.1 AF287134_11 (AF287134) NADH dehydrogenase subunit 2 [Ochromonas danica]	9.3
4112	13786586	gi 13786586 ref NP_112718.1  ORF55 [Bacteriophage TP901-1] gb AAK38072.1  (AF304433) ORF55 [Bacteriophage TP901-1]	1.4
4115	14743649	gi 14743649 ref XP_036116.1  KIAA0594 protein [Homo sapiens]	2E-46
4121	7491991	gi 7491991 pir T41608 hypothetical protein SPCC790.03 - fission yeast (Schizosaccharomyces pombe) emb CAA21293.1  (AL031855) hypothetical protein [Schizosaccharomyces pombe]	2.9
4122	6647413	gi 6647413 sp Q9ZE52 ALR_RICPR ALANINE RACEMASE pir F71718 alanine racemase (alr) RP095 - Rickettsia prowazekii emb CAA14565.1  (AJ235270) ALANINE RACEMASE (alr) [Rickettsia prowazekii]	9.1
4125	7293814	gi 7293814 gb AAF49181.1  (AE003517) nes gene product [Drosophila melanogaster]	7.7
4128	7505316	gi 7505316 pir T23351 hypothetical protein K05D4.2 - Caenorhabditis elegans emb CAB07252.1  (Z92804) contains similarity to Pfam domain: PF01461 (7TM chemoreceptor), Score=118.9, E-value=3.1e-32, N=1 [Caenorhabditis elegans]	9.3
4139	4335719	gi 4335719 gb AAD17397.1  (AC006248) putative C3HC4-type RING zinc finger protein [Arabidopsis thaliana]	5.1
4140	9625775	gi 9625775 ref NP_040024.1  Conserved herpesvirus spliced gene [human herpesvirus 5] sp P16732 VTER_HCMVA PROBABLE DNA PACKAGING PROTEIN emb CAA35363.1  (X17403) Conserved herpesvirus spliced gene [human herpesvirus 5]	4.3
4144	7510388	gi 7510388 pir T27298 hypothetical protein Y68A4A.7 - Caenorhabditis elegans emb CAA16418.1  (AL021503) predicted using Genefinder~contains similarity to Pfam domain: PF01604 (7TM chemoreceptor), Score=-48.3, E-value=7.1e-07, N=1 [Caenorhabditis elegans]	3.4

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
4145	7243081	gi 7243081 dbj BAA92588.1  (AB037771) KIAA1350 protein [Homo sapiens]	e-112
4149	13812221	gi 13812221 ref NP_113352.1  hypothetical protein [Guillardia theta] gb AAK39908.1 AF165818_116 (AF165818) hypothetical protein [Guillardia theta]	5.1
4150	7706557	gi 7706557 ref NP_057604.1  hepatocellular carcinoma-associated antigen 59; hypothetical protein [Homo sapiens] ref XP_017552.1  hypothetical protein [Homo sapiens] ref XP_052691.1  hypothetical protein [Homo sapiens] gb AAF37561.1  (AF218421) hepatocellular carcinoma-associated antigen 59 [Homo sapiens] gb AAH07664.1 AAH07664 (BC007664) hepatocellular carcinoma-associated antigen 59 [Homo sapiens]	3E-81
4151	984305	gi 984305 gb AAA75468.1  (U25975) hPAK65 [Homo sapiens]	1E-11
4153	14729667	gi 14729667 ref XP_029101.1  KIAA0947 protein [Homo sapiens]	0.47
4154	3355648	gi 3355648 emb CAA08785.1  (AJ009688) tungsten formylmethanofuran dehydrogenase subunit fwdB [Methanothermobacter wolfeii]	0.54
4156	12513192	gi 12513192 gb AAG54704.1 AE005215_1 (AE005215) putative transport protein [Escherichia coli O157:H7 EDL933] dbj BAB33831.1  (AP002551) putative transport protein [Escherichia coli O157:H7]	4.1
4159	7472450	gi 7472450 pir D75370 hypothetical protein - Deinococcus radiodurans (strain R1) gb AAF11218.1 AE002008_13 (AE002008) hypothetical protein [Deinococcus radiodurans]	7.9
4160	13876525	gi 13876525 gb AAK43501.1 AC020666_11 (AC020666) hypothetical protein [Oryza sativa]	4.6
4162	6665675	gi 6665675 gb AAF22966.1 AF175308_1 (AF175308) acetyl-CoA carboxylase [Sus scrofa]	2E-11
4163	7509105	gi 7509105 pir T31728 probable cysteine proteinase (EC 3.4.22.-) W07B8.4 - Caenorhabditis elegans gb AAB65345.1  (AF016426) Hypothetical protein W07B8.4 [Caenorhabditis elegans]	1.4
4164	7510169	gi 7510169 pir T31555 hypothetical protein Y53H1C.2 - Caenorhabditis elegans emb CAB55064.1  (AL117201) predicted using Genefinder [Caenorhabditis elegans]	7

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
4166	6683126	gi 6683126 dbj BAA20797.2  (AB002337) KIAA0339 protein [Homo sapiens]	9.8
4167	7485930	gi 7485930 pir T10623 hypothetical protein F21C20.160 - Arabidopsis thaliana emb CAB45847.1  (AL080254) putative protein [Arabidopsis thaliana] emb CAB79081.1  (AL161553) putative protein [Arabidopsis thaliana]	5.9
4171	11348277	gi 11348277 pir C83019 conserved hypothetical protein PA5019 [imported] - Pseudomonas aeruginosa (strain PAO1) gb AAG08404.1 AE004914_5 (AE004914) conserved hypothetical protein [Pseudomonas aeruginosa]	3.5
4172	1150480	gi 1150480 emb CAA91110.1  (Z54312) hypothetical protein [Lactobacillus sakei]	3.2
4173	14776432	gi 14776432 ref XP_050788.1  similar to KIAA0133 gene product (H. sapiens) [Homo sapiens]	0.3
4175	13569915	gi 13569915 ref NP_112205.1  amnionless protein [Homo sapiens] gb AAK28532.1 AF328788_1 (AF328788) amnionless [Homo sapiens]	8.9
4180	6978481	gi 6978481 ref NP_036905.1  a-kinase anchoring protein [Rattus norvegicus] sp Q62924 AK11_RAT A KINASE ANCHOR PROTEIN 11 (PROTEIN KINASE A ANCHORING PROTEIN 11) (PRKA11) (A KINASE ANCHOR PROTEIN 220 KDA) (AKAP 220) pir T42732 A-kinase anchoring protein AKAP 220 - rat gb AAB06559.1  (U48288) AKAP 220 [Rattus norvegicus]	3.1
4187	14738118	gi 14738118 ref XP_048649.1  Apobec-1 complementation factor; APOBEC-1 stimulating protein [Homo sapiens] emb CAB94754.1  (AJ272078) APOBEC-1 stimulating protein [Homo sapiens]	1E-37
4189	13183342	gi 13183342 gb AAK15157.1 AF284034_1 (AF284034) vitellogenin B [Melanogrammus aeglefinus]	9.4

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
4192	13123985	gi 13123985 sp Q9N293 B3G5_GORGO BETA-1,3-GALACTOSYLTRANSFERASE 5 (BETA-1,3-GALTASE 5) (BETA3GAL-T5) (B3GAL-T5) (UDP-GALACTOSE:BETA-N-ACETYLGLUCOSAMINE BETA-1,3-GALACTOSYLTRANSFERASE 5) (UDP-GAL:BETA-GLCNAC BETA-1,3-GALACTOSYLTRANSFERASE 5) (BETA-3-GX-T5) dbj BAA94501.1  (AB041416) UDP-Gal:GlcNAc beta1,3-galactosyltransferase 5 [Homo sapiens]	4
4194	7295768	gi 7295768 gb AAF51070.1  (AE003579) CG3410 gene product [Drosophila melanogaster]	1.5
4195	7290544	gi 7290544 gb AAF45996.1  (AE003432) CG6903 gene product [Drosophila melanogaster]	6
4200	9966502	gi 9966502 gb AAG10295.1 AF275272_1 (AF275272) unknown [Schizophyllum commune]	0.83
4213	6010435	gi 6010435 gb AAF01135.1  (AF087699) erythrocyte membrane protein 3 [Plasmodium falciparum]	2.2
4216	14775884	gi 14775884 ref XP_043964.1  similar to KIAA0220 protein (H. sapiens) [Homo sapiens]	5E-12
4218	7511578	gi 7511578 pir T19209 probable protein kinase E02H4.3 - Caenorhabditis elegans emb CAA94122.1  (Z70205) Similarity to Drosophila Doa kinase (PIR Acc. No. S44077), contains similarity to Pfam domain: PF00069 (Eukaryotic protein kinase domain), Score=184.6, E-value=5.2e-52, N=1~cDNA EST yk5d6.3 comes from this gene~cDNA EST yk5d6.5 comes from this> emb CAA91979.1  (Z68003) Similarity to Drosophila Doa kinase (PIR Acc. No. S44077), contains similarity to Pfam domain: PF00069 (Eukaryotic protein kinase domain), Score=184.6, E-value=5.2e-52, N=1~cDNA EST yk5d6.3 comes from this gene~cDNA EST yk5d6.5 comes from this>	0.069
4220	7471938	gi 7471938 pir G75366 glucose-1-phosphate adenyltransferase - Deinococcus radiodurans (strain R1) gb AAF11244.1 AE002010_7 (AE002010) glucose-1-phosphate adenyltransferase [Deinococcus radiodurans]	2.6



Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
4224	4506051	gi 4506051 ref NP_000937.1  primase, polypeptide 1 (49kD); primase polypeptide 1 (49kD) [Homo sapiens] ref XP_048930.1  primase, polypeptide 1 (49kD) [Homo sapiens] ref XP_006706.3  primase, polypeptide 1 (49kD) [Homo sapiens] sp P49642 PRI1_HUMAN DNA PRIMASE SMALL SUBUNIT (DNA PRIMASE 49 KDA SUBUNIT) (P49) pir  S45630 DNA primase chain p48 - human emb CAA52377.1  (X74330) DNA primase (subunit p48) [Homo sapiens] gb AAH05266.1 AAH05266 (BC005266) primase, polypeptide 1 (49kD) [Homo sapiens]	0.014
4228	13812048	gi 13812048 ref NP_113182.1  putative protein kinase [Guillardia theta] gb AAK39750.1 AF083031_107 (AF083031) putative protein kinase [Guillardia theta]	1.8
4229	7465475	gi 7465475 pir  S70173 autoinducer synthesis protein - Pseudomonas aeruginosa	1.3
4236	11288518	gi 11288518 pir  T49586 related to nif-specific regulatory protein [imported] - Neurospora crassa emb CAB91387.1  (AL355930) related to nif-specific regulatory protein [Neurospora crassa]	6.8
4237	2072951	gi 2072951 gb AAC51263.1  (U93564) putative p150 [Homo sapiens]	3.1
4244	1903416	gi 1903416 gb AAC53095.1  (U76112) translation repressor NAT1 [Mus musculus]	2E-15
4248	14749171	gi 14749171 ref XP_038309.1  hypothetical protein XP_038309 [Homo sapiens]	4.3
4251	7432367	gi 7432367 pir  T13881 NADH dehydrogenase (ubiquinone) (EC 1.6.5.3) chain 4 - Chlorogonium elongatum mitochondrion emb CAA73990.1  (Y13644) NADH dehydrogenase subunit 4 [Chlorogonium elongatum]	1.2
4255	13621755	gi 13621755 gb AAK33536.1  (AE006511) putative nucleotide sugar dehydrogenase [Streptococcus pyogenes M1 GAS]	2.7
4259	9880	gi 9880 emb CAA36427.1  (X52177) RNA polymerase beta subunit (697 AA) [Plasmodium falciparum]	1.1
4260	10314010	gi 10314010 ref NP_066241.1  replicase polyprotein [acute bee paralysis virus] gb AAG13118.1 AF150629_1 (AF150629) replicase polyprotein [acute bee paralysis virus]	7.5

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
4261	1170902	gi 1170902 sp P43245 MDR1_RAT MULTIDRUG RESISTANCE PROTEIN 1 (P-GLYCOPROTEIN 1) pir  JH0502 p-glycoprotein - rat	5.2
4265	10180785	gi 10180785 gb AAG14273.1 AF243438_88 (AF243438) RS1 immediate-early gene transactivator-like protein [Gallid herpesvirus 2] gb AAG14284.1 AF243438_99 (AF243438) RS1 immediate-early gene transactivator ICP4-like protein [Gallid herpesvirus 2]	1.3
4267	1353257	gi 1353257 gb AAB06234.1  (U26665) dimethyl sulphoxide reductase subunit B [Haemophilus influenzae]	4.8
4268	4240315	gi 4240315 dbj BAA74936.1  (AB020720) KIAA0913 protein [Homo sapiens]	3.3
4269	4493991	gi 4493991 emb CAB39050.1  (AL034559) hypothetical protein, PFC1060c [Plasmodium falciparum]	6.3
4272	4557503	gi 4557503 ref NP_001072.1  cubilin precursor; cubilin; intrinsic factor-cobalamin receptor; intrinsic factor B12-receptor [Homo sapiens] pir  T09456 intrinsic factor-B12 receptor Cubilin precursor - human gb AAC82612.1  (AF034611) intrinsic factor-B12 receptor precursor; cubilin [Homo sapiens]	5E-10
4277	7504212	gi 7504212 pir  T22670 hypothetical protein F54F11.1 - Caenorhabditis elegans emb CAB05738.1  (Z83229) Weak similarity with glycerol phospholipid-cholesterol acyltransferase~cDNA EST yk479h12.3 comes from this gene~cDNA EST yk479h12.5 comes from this gene [Caenorhabditis elegans]	8
4279	421548	gi 421548 pir  B47013 butanol dehydrogenase (EC 1.1.1. ) II - Clostridium acetobutylicum	1.7
4284	7497553	gi 7497553 pir  T19999 hypothetical protein C47D12.2 - Caenorhabditis elegans emb CAA93767.1  (Z69902) predicted using Genefinder~cDNA EST yk14e2.3 comes from this gene~cDNA EST yk88e3.3 comes from this gene~cDNA EST yk132h1.3 comes from this gene~cDNA EST yk88e3.5 comes from this gene~cDNA EST yk132h1.5 comes from this gene~cDNA EST yk422c3.3 >	6.7

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
4292	5042237	gi 5042237 emb CAB44655.1  (Y18605) hypothetical protein RvD1-Rv2024c' [Mycobacterium bovis BCG] gb AAK46361.1  (AE007059) helicase, putative/conserved hypothetical protein [Mycobacterium tuberculosis CDC1551]	6.3
4298	14746217	gi 14746217 ref XP_011563.2  hypothetical protein FLJ21634 [Homo sapiens] dbj BAB15338.1  (AK026056) unnamed protein product [Homo sapiens]	0.000000002
4299	6005978	gi 6005978 ref NP_009098.1  zinc finger protein 258 [Homo sapiens] gb AAD15797.1  (AF055470) ZNF258 [Homo sapiens]	9E-26
4303	9845291	gi 9845291 ref NP_063945.1  phosphatidylinositol polyphosphate 5-phosphatase type IV [Homo sapiens] gb AAF81404.1 AF187891_1 (AF187891) phosphatidylinositol polyphosphate 5-phosphatase type IV [Homo sapiens]	7.7
4305	13620879	gi 13620879 dbj BAB40992.1  (AB049938) alpha1,3-fucosyltransferase [Rattus norvegicus]	2.7
4308	6424813	gi 6424813 gb AAF08148.1  (AF130192) NADH dehydrogenase subunit F [Valeriana fauriei]	9.6
4311	5834894	gi 5834894 ref NP_006964.1 ND5_10021 NADH dehydrogenase subunit 5 [Caenorhabditis elegans] sp P24896 NU5M_CAEEL NADH-UBIQUINONE OXIDOREDUCTASE CHAIN 5 pir S26037 NADH dehydrogenase (ubiquinone) (EC 1.6.5.3) chain 5 - Caenorhabditis elegans mitochondrion emb CAA38162.1  (X54252) ND5 protein (AA 1 - 527) [Caenorhabditis elegans]	1.6
4314	11135954	gi 11135954 sp Q9TC94 YM16_NEPOL HYPOTHETICAL PROTEIN YMF16 gb AAF03203.1 AF110138_35 (AF110138) homolog of E. coli MttB, a protein involved in folded protein translocation and targeting across bacterial membranes [Nephroselmis olivacea]	2.2
4316	14089831	gi 14089831 emb CAC13590.1  (AL445564) unknown; predicted coding region [Mycoplasma pulmonis]	6.5
4317	10728595	gi 10728595 gb AAF52302.2  (AE003611) CG9011 gene product [Drosophila melanogaster]	4E-19

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
4318	9187479	gi 9187479 emb CAB96962.1  (AJ007508) magnesium-chelatase subunit chlI [Gnetum gnemon]	2.4
4322	7469635	gi 7469635 pir S76563 hypothetical protein - Synechocystis sp. (strain PCC 6803) dbj BAA10409.1  (D64002) ORF_ID:sll0188~unknown protein [Synechocystis sp. PCC 6803]	1.6
4324	15021476	gi 15021476 gb AAK77753.1 AF369029_84 (AF369029) ORF84 [white spot syndrome virus]	1.7
4333	11466210	gi 11466210 ref NP_066533.1  NADH dehydrogenase subunit 2 [Naegleria gruberi] gb AAG17811.1 AF288092_36 (AF288092) NADH dehydrogenase subunit 2 [Naegleria gruberi]	0.46
4336	127494	gi 127494 sp P25127 MT_ESOLU METALLOTHIONEIN (MT) pir S17175 Metallothionein - Northern pike pir S38334 metallothionein - northern pike pir S31723 metallothionein - northern pike emb CAA42035.1  (X59392) metallothionein [Esox lucius] emb CAA49636.1  (X70042) Metallothionein [Esox lucius]	1
4341	6009729	gi 6009729 dbj BAA85039.1  (AB026129) alpha-2-macroglobulin-2 [Cyprinus carpio]	0.00002
4342	1170606	gi 1170606 sp P43188 KADC_MAIZE ADENYLATE KINASE, CHLOROPLAST (ATP-AMP TRANSPHOSPHORYLASE) pir S45634 adenylate kinase (EC 2.7.4.3), chloroplast - maize pdb 1ZAK A Chain A, Adenylate Kinase From Maize In Complex With The Inhibitor P1,P5-Bis(Adenosine-5'-)pentaphosphate (Ap5a) pdb 1ZAK B Chain B, Adenylate Kinase From Maize In Complex With The Inhibitor P1,P5-Bis(Adenosine-5'-)pentaphosphate (Ap5a)	5E-13
4345	543537	gi 543537 pir JN0720 glucosyl transferase - Shigella flexneri phage X gb AAA71895.1  (L05001) glucosyl transferase [bacteriophage Sfx]	8.1
4347	7297011	gi 7297011 gb AAF52281.1  (AE003611) CG11149 gene product [Drosophila melanogaster]	0.93
4348	11558496	gi 11558496 emb CAC17816.1  (AJ276292) sodium iodide symporter [Sus scrofa]	2.6

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
4351	7293017	gi 7293017 gb AAF48404.1  (AE003497) CG12398 gene product [ <i>Drosophila melanogaster</i> ]	9
4352	7486021	gi 7486021 pir T06133 hypothetical protein F23E12.200 - <i>Arabidopsis thaliana</i> emb CAA18745.1  (AL022604) putative protein [ <i>Arabidopsis thaliana</i> ] emb CAB80241.1  (AL161587) putative protein [ <i>Arabidopsis thaliana</i> ]	0.085
4353	10047323	gi 10047323 dbj BAB13449.1  (AB046843) KIAA1623 protein [ <i>Homo sapiens</i> ]	2.7
4359	262249	gi 262249 gb AAB24620.1  (S52010) orf1 5' of EpoR [ <i>Mus sp.</i> ]	0.67
4361	14589828	gi 14589828 gb AAK70656.1 AC024771_1 (AC024771) Hypothetical protein Y40B10A.1 [ <i>Caenorhabditis elegans</i> ]	0.45
4364	543537	gi 543537 pir JN0720 glucosyl transferase - <i>Shigella flexneri</i> phage X gb AAA71895.1  (L05001) glucosyl transferase [bacteriophage SfX]	6.6
4366	14587208	gi 14587208 dbj BAB61142.1  (AP003199) hypothetical protein [ <i>Oryza sativa</i> ]	5.1
4370	13385738	gi 13385738 ref NP_080509.1  RIKEN cDNA 4933434I20 gene [ <i>Mus musculus</i> ] dbj BAB30173.1  (AK016272) putative [ <i>Mus musculus</i> ]	0.046
4372	7507823	gi 7507823 pir T24908 hypothetical protein T14D7.2 - <i>Caenorhabditis elegans</i> emb CAB03365.1  (Z81123) cDNA EST EMBL:M88978 comes from this gene~cDNA EST yk419b8.3 comes from this gene~cDNA EST yk285a8.3 comes from this gene~cDNA EST yk398c1.3 comes from this gene~cDNA EST yk350c8.3 comes from this gene~cDNA EST yk350c8.5 comes from this gene~c>	0.33
4376	7302573	gi 7302573 gb AAF57655.1  (AE003798) CG15086 gene product [ <i>Drosophila melanogaster</i> ]	1.1
4377	531764	gi 531764 emb CAA56961.1  (X81072) hypothetical protein in YTA7 5' region [ <i>Saccharomyces cerevisiae</i> ]	5.4

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
4378	585100	gi 585100 sp Q07287 ZPB_PIG ZONA PELLUCIDA SPERM-BINDING PROTEIN B PRECURSOR (ZONA PELLUCIDA 3-ALPHA) (ZONA PELLUCIDA GLYCOPROTEIN ZP3-ALPHA) pir S35712 sperm-binding glycoprotein ZP3-alpha precursor - pig gb AAA50164.1  (L11000) zp3-alpha sperm-binding glycoprotein [Sus scrofa]	2.5
4382	2148043	gi 2148043 pir S51527 S-receptor kinase (EC 2.7.1.-) A14 precursor - rape gb AAA62232.1  (U00443) S-receptor kinase [Brassica napus]	6
4383	2257556	gi 2257556 dbj BAA21448.1  (AB004539) probable membrane protein YOL130w [Schizosaccharomyces pombe]	7.9
4386	8928528	gi 8928528 sp Q44601 YTR1_BUCSC HYPOTHETICAL 35.1 KDA PROTEIN IN TRPA 3'REGION gb AAA92793.1  (U09185) unknown [Buchnera aphidicola]	9.3
4389	12518050	gi 12518050 gb AAG58518.1 AE005564_3 (AE005564) maltodextrin phosphorylase [Escherichia coli O157:H7 EDL933] dbj BAB37682.1  (AP002565) maltodextrin phosphorylase [Escherichia coli O157:H7]	4.8
4391	13813161	gi 13813161 gb AAK40397.1  (AE006644) Hypothetical protein [Sulfolobus solfataricus]	0.64
4393	13626090	gi 13626090 sp P78704 ACR2_NEUCR ACRIFLAVINE SENSITIVITY CONTROL PROTEIN ACR-2	3
4394	6680736	gi 6680736 ref NP_031522.1  AT motif binding factor 1 [Mus musculus] dbj BAA05046.1  (D26046) AT motif-binding factor [Mus musculus] prf 2207230A transcription factor ATBF1 [Mus musculus]	1.1
4395	7269957	gi 7269957 emb CAB79774.1  (AL161577) cyclic nucleotide and calmodulin-regulated ion channel-like protein [Arabidopsis thaliana]	5
4396	13812152	gi 13812152 ref NP_113279.1  hypothetical protein [Guillardia theta] gb AAK39839.1 AF165818_47 (AF165818) hypothetical protein [Guillardia theta]	2

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
4398	11350074	gi 11350074 pir G83141 hypothetical protein PA4035 [imported] - Pseudomonas aeruginosa (strain PAO1) gb AAG07422.1 AE004820_7 (AE004820) hypothetical protein [Pseudomonas aeruginosa]	1.8
4399	6601484	gi 6601484 gb AAF18995.1 AF211856_1 (AF211856) pulmonary surfactant protein A [Ovis aries] gb AAF31148.1 AF076633_1 (AF076633) pulmonary surfactant-associated protein A [Ovis aries]	2.3
4402	7480194	gi 7480194 pir T37054 hypothetical protein SCJ21.05 - Streptomyces coelicolor emb CAB52351.1  (AL109747) hypothetical SCJ21.05 [Streptomyces coelicolor A3(2)]	6.9
4403	123346	gi 123346 sp P16393 HMDH_STRPU 3-HYDROXY-3-METHYLGLUTARYL-COENZYME A REDUCTASE (HMG-COA REDUCTASE) pir A31898 hydroxymethylglutaryl-CoA reductase (NADPH) (EC 1.1.1.34) - sea urchin (Strongylocentrotus purpuratus) gb AAA30060.1  (J04200) HMGC0A reductase (EC 1.1.1.34) [Strongylocentrotus purpuratus]	4.2
4404	1870163	gi 1870163 emb CAB05927.1  (Z83335) unknown [Streptococcus pneumoniae]	8.3
4408	5739524	gi 5739524 ref NP_000544.1  Werner syndrome protein [Homo sapiens] sp Q14191 WRN_HUMAN WERNER SYNDROME HELICASE gb AAC41981.1  (L76937) Homo sapiens Werner syndrome gene, complete cds gb AAC63361.1  (AF091214) WRN [Homo sapiens] gb AAF06162.1  (AF181897) WRN [Homo sapiens]	7.2
4409	7494315	gi 7494315 pir C71607 hypothetical protein PFB0745w malaria parasite (Plasmodium falciparum) gb AAC71938.1  (AE001415) hypothetical protein [Plasmodium falciparum]	2.4
4414	13477147	gi 13477147 gb AAH05031.1 AAH05031 (BC005031) Unknown (protein for IMAGE:3532103) [Homo sapiens]	9.1
4415	6650234	gi 6650234 gb AAF21778.1  (AF072567) zinc finger protein 74 isoform III [Homo sapiens]	3.3

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
4419	7498637	gi 7498637 pir T32474 hypothetical protein F08F1.3 - <i>Caenorhabditis elegans</i> gb AAB71303.1  (AF026213) Hypothetical protein F08F1.3 [ <i>Caenorhabditis elegans</i> ]	9.9
4420	6016842	gi 6016842 dbj BAA85182.1  (AB033168) nuclear protein ZAP [ <i>Mus musculus</i> ]	2.2
4422	125704	gi 125704 sp P08630 SRC2_DROME TYROSINE-PROTEIN KINASE SRC28C pir TVFFDS protein-tyrosine kinase (EC 2.7.1.112) src2 - fruit fly ( <i>Drosophila melanogaster</i> ) gb AAA28912.1  (M16599) Dsrc28C protein [ <i>Drosophila melanogaster</i> ]	8.9
4423	14746157	gi 14746157 ref XP_046163.1  T-cell lymphoma-1 [ <i>Homo sapiens</i> ]	8.6
4424	13235641	gi 13235641 emb CAC33768.1  (AJ308570) S-adenosyl-L-methionine:salicylic acid carboxyl methyltransferase [ <i>Stephanotis floribunda</i> ]	6.3
4426	12805257	gi 12805257 gb AAH02091.1 AAH02091 (BC002091) Unknown (protein for MGC:6342) [ <i>Mus musculus</i> ]	5.5
4428	7488979	gi 7488979 pir T07612 cellulase (EC 3.2.1.4) Cel3, membrane-anchored - tomato gb AAC49704.1  (U78526) endo-1,4-beta-glucanase [ <i>Lycopersicon esculentum</i> ]	9.5
4429	14741807	gi 14741807 ref XP_049622.1  KIAA1630 protein [ <i>Homo sapiens</i> ]	2E-16
4434	6324137	gi 6324137 ref NP_014207.1  chitin synthase 1; Chs1p [ <i>Saccharomyces cerevisiae</i> ] sp P08004 CHS1_YEAST CHITIN SYNTHASE 1 (CHITIN-UDP ACETYL-GLUCOSAMINYL TRANSFERASE 1) pir A23944 chitin synthase (EC 2.4.1.16) CHS1 - yeast ( <i>Saccharomyces cerevisiae</i> ) gb AAA34491.1  (M14045) chitin synthase [ <i>Saccharomyces cerevisiae</i> ] emb CAA96086.1  (Z71468) ORF YNL192w [ <i>Saccharomyces cerevisiae</i> ]	6.8
4436	6678958	gi 6678958 ref NP_032667.1  microtubule associated testis specific serine/threonine protein kinase [ <i>Mus musculus</i> ] pir A54602 microtubule-associated serine/threonine protein kinase MAST205 - mouse gb AAC04312.1  (U02313) protein kinase [ <i>Mus musculus</i> ]	0.41



Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
4445	7494262	gi 7494262 pir T18489 hypothetical protein C0820w - malaria parasite (Plasmodium falciparum) emb CAB11128.1  (Z98551) hypothetical protein, PFC0820w [Plasmodium falciparum]	6.3
4454	11245201	gi 11245201 gb AAG33502.1 AF302058_1 (AF302058) cytochrome oxidase I [Apocrypta sp. MSPAR2]	9.1
4457	6752960	gi 6752960 ref NP_033743.1  a disintegrin and metalloprotease domain 11; a disintegrin and metalloprotease domain (ADAM) 11 [Mus musculus] sp Q9R1V4 AD11_MOUSE ADAM 11 PRECURSOR (A DISINTEGRIN AND METALLOPROTEINASE DOMAIN 11) (METALLOPROTEINASE-LIKE, DISINTEGRIN-LIKE, AND CYSTEINE-RICH PROTEIN) (MDC) dbj BAA83384.1  (AB009676) ADAM11 [Mus musculus]	3.8
4462	103076	gi 103076 pir B21124 Bkm-like sex-determining region hypothetical protein CS314 - fruit fly (Drosophila melanogaster) (fragment)	0.14
4463	14742023	gi 14742023 ref XP_039778.1  HSPC047 protein [Homo sapiens]	1E-65
4464	13816057	gi 13816057 gb AAK42842.1  (AE006867) Agmatinase (agmatine ureohydrolase) (speB-2) [Sulfolobus solfataricus]	6.5
4466	295359	gi 295359 gb AAA21303.1  (L14824) surface antigen [Trypanosoma cruzi]	4.2
4471	2429459	gi 2429459 gb AAB70995.1  (AF025461) contains similarity to Canis familiaris (dog) 180k ribosome receptor (NID:g984113) [Caenorhabditis elegans]	2.2
4474	7296176	gi 7296176 gb AAF51469.1  (AE003588) CG2839 gene product [Drosophila melanogaster]	8.9
4475	14736857	gi 14736857 ref XP_005322.2  KIAA0967 protein [Homo sapiens]	0.33
4480	13959004	gi 13959004 gb AAK51055.1 AF361075_2 (AF361075) UL24 [Canine herpesvirus]	0.35

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
4483	7511539	gi 7511539 pir T18770 probable calcium channel protein - <i>Caenorhabditis elegans</i> emb CAA90091.1  (Z49907) similar to calcium channel alpha-2 subunit~cDNA EST yk134g4.5 comes from this gene~cDNA EST yk49c7.3 comes from this gene~cDNA EST yk134g4.3 comes from this gene~cDNA EST yk49c7.5 comes from this gene~cDNA EST yk349a4.3 comes from this gene~cD> emb CAA90141.1  (Z49912) similar to calcium channel alpha-2 subunit~cDNA EST yk134g4.5 comes from this gene~cDNA EST yk49c7.3 comes from this gene~cDNA EST yk134g4.3 comes from this gene~cDNA EST yk49c7.5 comes from this gene~cDNA EST yk349a4.3 comes from this gene~cD>	6
4484	11288486	gi 11288486 pir T49552 hypothetical protein B21J21.300 [imported] - <i>Neurospora crassa</i> emb CAB91353.1  (AL355929) hypothetical protein [ <i>Neurospora crassa</i> ]	9.5
4488	11120676	gi 11120676 ref NP_068546.1  putative envelope polyprotein [DG-75 Murine leukemia virus] gb AAG29094.1 AF221065_2 (AF221065) putative envelope polyprotein [DG-75 Murine leukemia virus]	1.8
4489	3901274	gi 3901274 gb AAC78630.1  (AF077821) inducible nitric oxide synthase; iNOS [ <i>Canis familiaris</i> ]	3.5
4491	11595582	gi 11595582 emb CAC18184.1  (AL451014) conserved hypothetical protein [ <i>Neurospora crassa</i> ]	3
4493	5835447	gi 5835447 ref NP_008371.1 ND6_13186 NADH dehydrogenase subunit 6 [ <i>Onchocerca volvulus</i> ] pir T11066 NADH dehydrogenase (ubiquinone) (EC 1.6.5.3) chain 6 - nematode ( <i>Onchocerca volvulus</i> ) mitochondrion gb AAC61613.1  (AF015193) NADH dehydrogenase subunit 6 [ <i>Onchocerca volvulus</i> ]	1
4494	13814848	gi 13814848 gb AAK41824.1  (AE006774) SSV1 hypothetical 14.8 kd protein (orf B-129) homolog [ <i>Sulfolobus solfataricus</i> ]	5.4
4500	14529727	gi 14529727 emb CAC42176.1  (AL135758) dM117J5.1 (novel protein similar to anonymous human, fly, worm and yeast proteins) [ <i>Mus musculus</i> ]	7E-97

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
4504	13512594	gi 13512594 gb AAK28688.1  (AF078553) unknown function U3 [Ehrlichia canis]	8.8
4506	6635084	gi 6635084 emb CAB64573.1  (AL135930) hypothetical protein L4738.02 [Leishmania major]	3.2
4508	11467470	gi 11467470 ref NP_043616.1  50S ribosomal protein L4 [Odontella sinensis] sp P49546 RK4_ODOSI CHLOROPLAST 50S RIBOSOMAL PROTEIN L4 pir S78275 ribosomal protein L4, chloroplast - Odontella sinensis chloroplast emb CAA91648.1  (Z67753) 50S ribosomal protein L4 [Odontella sinensis]	5.9
4509	4512681	gi 4512681 gb AAD21735.1  (AC006931) hypothetical protein [Arabidopsis thaliana]	0.73
4510	5835704	gi 5835704 ref NP_008519.1 ND4_15045 NADH dehydrogenase subunit 4 [Rhipicephalus sanguineus]. sp O99825 NU4M_RHISA NADH-UBIQUINONE OXIDOREDUCTASE CHAIN 4 pir T11162 NADH dehydrogenase (ubiquinone) (EC 1.6.5.3) chain 4 [similarity] - hardbacked tick (Rhipicephalus sanguineus) mitochondrion gb AAD05526.1  (AF081829) NADH dehydrogenase 4 [Rhipicephalus sanguineus]	6.8
4511	8922500	gi 8922500 ref NP_060600.1  hypothetical protein FLJ10539 [Homo sapiens] dbj BAA91669.1  (AK001401) unnamed protein product [Homo sapiens]	2E-13
4514	12018296	gi 12018296 ref NP_072138.1  CDC10 (cell division cycle 10, S.cerevisiae, homolog) [Rattus norvegicus] sp Q9WVC0 SEP7_RAT SEPTIN 7 (CDC10 PROTEIN HOMOLOG) gb AAD37861.1 AF142759_1 (AF142759) CDC10 [Rattus norvegicus]	6.9
4518	11357368	gi 11357368 pir T48358 hypothetical protein F12E4.100 - Arabidopsis thaliana emb CAB83293.1  (AL162751) putative protein [Arabidopsis thaliana]	1.1
4520	6754038	gi 6754038 ref NP_034456.1  glycoprotein 1a, alpha polypeptide [Mus musculus] gb AAC53320.1  (U91967) platelet glycoprotein Ib-alpha [Mus musculus]	0.53

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
4521	7437434	gi 7437434 pir D72038 DNA topoisomerase I CP1103 [imported] - Chlamydomophila pneumoniae (strains CWL029 and AR39) gb AAD18907.1  (AE001658) DNA Topoisomerase I-Fused to SWI Domain [Chlamydomophila pneumoniae CWL029] gb AAF38871.1  (AE002266) DNA topoisomerase I [Chlamydomophila pneumoniae AR39] dbj BAA98977.1  (AP002547) DNA topoisomerase I-fused to SWI domain [Chlamydomophila pneumoniae J138]	8.2
4525	1514669	gi 1514669 emb CAA87082.1  (Z46958) adenyl cyclase [Xenopus laevis]	0.86
4526	6321382	gi 6321382 ref NP_011459.1  similar to S. pombe sds23; Sds23p [Saccharomyces cerevisiae] sp P53172 YGF6_YEAST HYPOTHETICAL 58.1 KD PROTEIN IN UBC2-OLE1 INTERGENIC REGION pir S64060 probable membrane protein YGL056c - yeast (Saccharomyces cerevisiae) emb CAA96759.1  (Z72578) ORF YGL056c [Saccharomyces cerevisiae]	4.2
4528	7487690	gi 7487690 pir T01961 hypothetical protein T5H22.5 - Arabidopsis thaliana gb AAC62796.1  (AF096372) contains similarity to reverse transcriptase (Pfam: PF00078 rvt, E=4.3e-08) [Arabidopsis thaliana] emb CAB80803.1  (AL161498) similarity to [Arabidopsis thaliana]	3.9
4530	12839203	gi 12839203 dbj BAB24467.1  (AK006222) putative [Mus musculus]	9.2
4531	1177607	gi 1177607 emb CAA63219.1  (X92485) pva1 [Plasmodium vivax]	0.11
4534	7506781	gi 7506781 pir T24250 hypothetical protein R53.3a - Caenorhabditis elegans emb CAA91353.1  (Z66515) contains similarity to Pfam domain: PF00096 (Zinc finger, C2H2 type), Score=105.7, E-value=2.9e-28, N=5 [Caenorhabditis elegans]	3.2
4538	14041637	gi 14041637 emb CAC38421.1  (AJ302647) POL protein [Human immunodeficiency virus type 1]	2.8

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
4546	6324843	gi 6324843 ref NP_014912.1  Required for viability in the absence of Cin8p; Pac1p [Saccharomyces cerevisiae] sp P39946 PAC1_YEAST PAC1 PROTEIN pir S67166 PAC1 protein - yeast (Saccharomyces cerevisiae) emb CAA61775.1  (X89633) hypothetical protein [Saccharomyces cerevisiae] gb AAB00685.1  (U16827) Pac1p [Saccharomyces cerevisiae] emb CAA99493.1  (Z75177) ORF YOR269w [Saccharomyces cerevisiae]	4.2
4555	14424433	gi 14424433 ref NP_077816.1  ATPase, Class V, type 10C; ATPase type IV, phospholipid transporting (P-type) (putative) [Homo sapiens] gb AAK33100.1  (AY029504) aminophospholipid-transporting ATPase [Homo sapiens] dbj BAB47392.1  (AB051358) putative aminophospholipid translocase [Homo sapiens]	3E-10
4560	6714740	gi 6714740 emb CAB66205.1  (AL136502) putative prolyl aminopeptidase. [Streptomyces coelicolor A3(2)]	4.7
4562	6724176	gi 6724176 gb AAF26878.1 AF196232_1 (AF196232) T cell receptor V delta 6 [Rattus norvegicus]	7.4
4563	14783807	gi 14783807 ref XP_027541.1  hypothetical protein FLJ21858 [Homo sapiens]	3.1
4564	6478266	gi 6478266 gb AAF13781.1 AF129403_2 (AF129403) gamma subunit of membrane-bound ATP synthase [Buchnera aphidicola]	2
4566	7509812	gi 7509812 pir T26861 hypothetical protein Y43F8B.5 - Caenorhabditis elegans emb CAA21513.1  (AL032623) contains similarity to Pfam domain: PF00188 (SCP-like extracellular protein), Score=34.9, E-value=4.2e-09, N=2 [Caenorhabditis elegans]	5.7
4567	5230656	gi 5230656 gb AAD40953.1 AF148934_1 (AF148934) phantastica [Lycopersicon esculentum]	7.9
4578	14732381	gi 14732381 ref XP_050222.1  hypothetical protein XP_050222 [Homo sapiens]	0.0009
4581	14349161	gi 14349161 dbj BAB60707.1  (AB049622) ficolin 4 [Halocynthia roretzi]	2.5
4585	3599476	gi 3599476 gb AAC69336.1  (AF084637) serendipity alpha protein [Drosophila virilis]	2.4

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
4586	145512	gi 145512 gb AAC41418.1  (M55661) colonisation factor antigen d' [Escherichia coli]	8.9
4590	7499104	gi 7499104 pir T20906 hypothetical protein F14F7.1 - Caenorhabditis elegans emb CAB04111.1  (Z81503) predicted using Genefinder~contains similarity to Pfam domain: PF01484 (Nematode cuticle collagen N-terminal domain), Score=31.5, E-value=6.2e-06, N=1~cDNA EST yk56g5.3 comes from this gene~cDNA EST yk56g5.5 comes from this gene [Caenorhabditis]	9.8
4591	7267234	gi 7267234 emb CAB80841.1  (AL161501) putative sugar transporter [Arabidopsis thaliana]	9.9
4593	401050	gi 401050 sp Q01656 RSP4_CHLRE FLAGELLAR RADIAL SPOKE PROTEIN 4 pir A44498 radial spoke protein 4 - Chlamydomonas reinhardtii gb AAA33092.1  (M87526) flagellar radial spoke protein [Chlamydomonas reinhardtii]	0.31
4594	7300719	gi 7300719 gb AAF55865.1  (AE003734) CG5862 gene product [Drosophila melanogaster]	1.5
4596	12851516	gi 12851516 dbj BAB29072.1  (AK013941) putative [Mus musculus]	1.1
4598	14193314	gi 14193314 gb AAK55896.1 AF267213_2 (AF267213) ATP synthase gamma subunit [Candidatus Carsonella ruddii]	5.2
4599	13898998	gi 13898998 gb AAK48930.1 AF359251_1 (AF359251) extracellular polypeptide Ecp76 [Chlamydomonas reinhardtii]	0.17
4601	8922500	gi 8922500 ref NP_060600.1  hypothetical protein FLJ10539 [Homo sapiens] dbj BAA91669.1  (AK001401) unnamed protein product [Homo sapiens]	4.7
4605	7494152	gi 7494152 pir T18410 carbamoyl-phosphate synthase (glutamine-hydrolyzing) (EC 6.3.5.5) II - malaria parasite (Plasmodium falciparum) gb AAA29522.1  (L32150) carbamoyl phosphate synthetase II [Plasmodium falciparum]	8.7
4607	6178092	gi 6178092 dbj BAA86168.1  (AB031705) ORF2 protein [TT virus]	3.4
4608	122078	gi 122078 sp P02301 H34_MOUSE HISTONE H3.4 (EMBRYONIC) emb CAA24131.1  (V00754) reading frame histone H3 [Mus musculus]	0.059

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
4610	2598224	gi 2598224 emb CAA69955.1  (Y08696) aldehyde dehydrogenase [Gluconacetobacter europaeus]	2.1
4612	12382242	gi 12382242 gb AAG53080.1 AF263824_1 (AF263824) 5'A2rel-related protein [Leishmania donovani]	3.2
4613	1405336	gi 1405336 dbj BAA13060.1  (D86240) hypothethcal membrane transporter [Staphylococcus aureus] gb AAD21958.1  (AF101234) putative membrane protein DltB [Staphylococcus aureus] dbj BAB42033.1  (AP003132) DltB membrane protein [Staphylococcus aureus subsp. aureus N315] dbj BAB57095.1  (AP003360) DltB membrane protein [Staphylococcus aureus subsp. aureus Mu50]	7.4
4616	6321803	gi 6321803 ref NP_011879.1  PolyA-binding protein; Mip6p [Saccharomyces cerevisiae] sp P38760 YHH5_YEAST HYPOTHETICAL 75.9 KDA PROTEIN IN SPO13-ARG4 INTERGENIC REGION pir  S46788 PES4 protein homolog YHR015w - yeast (Saccharomyces cerevisiae) gb AAB68942.1  (U10400) Yhr015wp [Saccharomyces cerevisiae]	5.3
4618	14749154	gi 14749154 ref XP_031524.1  AF15q14 protein [Homo sapiens]	9E-94
4621	12837658	gi 12837658 dbj BAB23899.1  (AK005241) putative [Mus musculus] dbj BAB26680.1  (AK010067) putative [Mus musculus]	6.8
4622	9628166	gi 9628166 ref NP_042752.1  CD2 homolog [African swine fever virus] pir  A40678 T-cell adhesion receptor CD2 homolog - African swine fever virus gb AAA42691.1  (L16864) cd2 homologue [African swine fever virus] gb AAA65288.1  (U18466) CD2 homolog [African swine fever virus] prf  2113434BJ CD2-like protein [African swine fever virus]	7.6
4625	56691	gi 56691 emb CAA68549.1  (Y00497) precursor (AA - 24 to 198) [Rattus norvegicus]	4.2
4628	10946710	gi 10946710 ref NP_067350.1  Rhesus blood group-associated B glycoprotein; Rh type B glycoprotein [Mus musculus] gb AAF19371.1  (AF193808) Rh type B glycoprotein [Mus musculus]	9.9

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
4631	7507118	gi 7507118 pir T24482 hypothetical protein T05A1.2 - <i>Caenorhabditis elegans</i> emb CAA92476.1  (Z68219) contains similarity to Pfam domain: PF01391 (Collagen triple helix repeat (20 copies)), Score=86.4, E-value=1.8e-22, N=2; PF01484 (Nematode cuticle collagen N-terminal domain), Score=23.9, E-value=0.0012, N=1~cDNA EST CEMSE21F comes from this >	3.6
4634	2072964	gi 2072964 gb AAC51271.1  (U93569) putative p150 [Homo sapiens]	0.12
4636	13385228	gi 13385228 ref NP_080036.1  RIKEN cDNA 4933428I03 gene [Mus musculus] dbj BAB30529.1  (AK016968) putative [Mus musculus] dbj BAB30656.1  (AK017257) putative [Mus musculus]	2.1
4639	13637800	gi 13637800 ref XP_017899.1  hypothetical protein FLJ12673 [Homo sapiens]	2E-11
4645	14759884	gi 14759884 ref XP_010198.3  64448 [Homo sapiens] sp Q9BZS1 FXP3_HUMAN FORKHEAD BOX PROTEIN P3 (ZINC FINGER PROTEIN JM2) (SCURFIN) gb AAG53607.1 AF277993_1 (AF277993) scurfin [Homo sapiens]	0.000002
4651	9758192	gi 9758192 dbj BAB08666.1  (AB018109) pectinesterase [Arabidopsis thaliana]	5.5
4653	9989055	gi 9989055 gb AAG10818.1 AC011808_6 (AC011808) Hypothetical protein [Arabidopsis thaliana]	6E-11
4658	560700	gi 560700 gb AAB31458.1  gibbon ape leukemia virus receptor [Mus musculus=Japanese feral mice, spp. molossinus, susceptible cells, Peptide, 680 aa]	7
4659	3878238	gi 3878238 emb CAA81588.1  (Z27078) cDNA EST yk181g1.5 comes from this gene~cDNA EST yk153a11.5 comes from this gene~cDNA EST yk465b1.5 comes from this gene [Caenorhabditis elegans]	1.3



Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
4663	141028	gi 141028 sp P04540 NU5M_TRYBB NADH-UBIQUINONE OXIDOREDUCTASE CHAIN 5 pir QQUTC5 NADH dehydrogenase (ubiquinone) (EC 1.6.5.3) chain 5 - Trypanosoma brucei mitochondrion gb AAB59225.1  (M14820) NADH dehydrogenase subunit 5 [Trypanosoma brucei] emb CAB57807.1  (X01094) unidentified reading frame 10 [Trypanosoma brucei]	0.54
4664	5442110	gi 5442110 gb AAD43259.1 AF126468_2 (AF126468) protease [Simian retrovirus type 2]	0.3
4666	12860471	gi 12860471 dbj BAB31968.1  (AK020018) putative [Mus musculus]	7.6
4669	4103974	gi 4103974 gb AAD05047.1  (AF030414) FeMo protein of nitrogenase alpha subunit; NifD [Gluconacetobacter diazotrophicus]	9.1
4678	2072953	gi 2072953 gb AAC51264.1  (U93565) putative p150 [Homo sapiens]	0.057
4679	7208454	gi 7208454 gb AAF40208.1 AF233885_1 (AF233885) phospholipase C-like protein [Mus musculus]	9.6
4680	14193286	gi 14193286 gb AAK55875.1 AF267206_2 (AF267206) ATP synthase gamma subunit [Candidatus Carsonella ruddii]	9
4681	11361549	gi 11361549 pir A82772 hypothetical protein XF0722 [imported] - Xylella fastidiosa (strain 9a5c) gb AAF83532.1 AE003914_13 (AE003914) hypothetical protein [Xylella fastidiosa 9a5c]	3.1
4682	7463298	gi 7463298 pir A70144 hypothetical protein BB0354 - Lyme disease spirochete gb AAC66737.1  (AE001141) B. burgdorferi predicted coding region BB0354 [Borrelia burgdorferi]	5.4
4685	9631610	gi 9631610 ref NP_048389.1  contains Pro-rich Px motif, PAPK (8X); similar to Thermoproteus virus protein TPX, corresponds to Swiss-Prot Accession Number P19275 [Paramecium bursaria Chlorella virus 1] pir T17531 proline-rich protein A41R - Chlorella virus PBCV-1 gb AAC96409.1  (U42580) contains Pro-rich Px motif, PAPK (8X); similar to Thermoproteus virus protein TPX, corresponds to Swiss-Prot Accession Number P19275 [Paramecium bursaria Chlorella virus 1]	1.8

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
4688	14754644	gi 14754644 ref XP_030896.1  similar to hypothetical protein MGC5384 (H. sapiens) [Homo sapiens]	9E-48
4689	2865163	gi 2865163 dbj BAA24799.1  (AB007836) Hic-5 [Homo sapiens]	2E-16
4693	6760239	gi 6760239 gb AAF28263.1 AF178655_4 (AF178655) fusion F [Bovine parainfluenza virus 3]	9.8
4698	13446199	gi 13446199 emb CAC34985.1  (AL035536) very hypothetical protein [Schizosaccharomyces pombe]	5.2
4699	6320491	gi 6320491 ref NP_010571.1  synaptonemal complex protein; Zip1p [Saccharomyces cerevisiae] sp P31111 ZIP1_YEAST SYNAPTONEMAL COMPLEX PROTEIN ZIP1 pir S70115 ZIP1 protein - yeast (Saccharomyces cerevisiae) gb AAB64474.1  (U51031) Zip1p: Synaptonemal complex protein (Swiss Prot. accession number P31111). [Saccharomyces cerevisiae]	0.001
4703	416704	gi 416704 sp Q03376 BAR3_CHITE BALBIANI RING PROTEIN 3 PRECURSOR pir S08167 Balbiani ring 3 protein - midge (Chironomus tentans) emb CAA36506.1  (X52263) balbiani ring 3 (BR3) [Chironomus tentans]	5.4
4709	6005948	gi 6005948 ref NP_009118.1  WW domain-containing binding protein 4; formin binding protein 21 [Homo sapiens] ref XP_007153.1  WW domain-containing binding protein 4 [Homo sapiens] ref XP_049374.1  WW domain-containing binding protein 4 [Homo sapiens] ref XP_049375.1  WW domain-containing binding protein 4 [Homo sapiens] gb AAC34811.1  (AF071185) formin binding protein 21 [Homo sapiens]	0.007
4713	629166	gi 629166 pir S39791 neurotoxin - Clostridium botulinum	2.5
4719	4096360	gi 4096360 gb AAC99858.1  (U31159) CR16 [Rattus norvegicus] gb AAC99859.1  (U31169) SH3 domain binding protein [Rattus norvegicus]	4.3
4723	11352438	gi 11352438 pir F83161 pyocin protein PA3866 [imported] - Pseudomonas aeruginosa (strain PAO1) gb AAG07253.1 AE004804_1 (AE004804) pyocin protein [Pseudomonas aeruginosa]	9.1
4725	14761847	gi 14761847 ref XP_017198.2  hypothetical protein FLJ12085 [Homo sapiens]	0.0007

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
4726	7475497	gi 7475497 pir B70045 hypothetical protein yvpB - Bacillus subtilis gb AAC67292.1  (AF017113) YvpB [Bacillus subtilis] emb CAB15499.1  (Z99121) yvpB [Bacillus subtilis]	9
4731	11466185	gi 11466185 ref NP_066508.1  NADH dehydrogenase subunit 11 [Naegleria gruberi] gb AAG17786.1 AF288092_11 (AF288092) NADH dehydrogenase subunit 11 [Naegleria gruberi]	6.2
4735	9802589	gi 9802589 gb AAF99791.1 AC012463_8 (AC012463) T2E6.16 [Arabidopsis thaliana]	7.7
4741	7512245	gi 7512245 pir T03849 Fas-binding protein Daxx - green monkey gb AAB66586.1  (AF015957) Fas-binding protein Daxx [Cercopithecus aethiops]	7.1
4746	345660	gi 345660 pir A45031 cysteine-rich fibroblast growth factor receptor - chicken gb AAA48769.1  (M95766) cysteine-rich fibroblast growth factor receptor [Gallus gallus]	1
4750	6324550	gi 6324550 ref NP_014619.1  mitochondrial initiation factor 2; Ifm1p [Saccharomyces cerevisiae] sp P25038 IF2M_YEAST TRANSLATION INITIATION FACTOR IF-2, MITOCHONDRIAL PRECURSOR (IF-2MT) (IF-2(MT)) pir S66706 translation initiation factor IF-2, mitochondrial - yeast (Saccharomyces cerevisiae) emb CAA99023.1  (Z74765) ORF YOL023w [Saccharomyces cerevisiae]	8.1
4751	12249161	gi 12249161 ref NP_066211.2  cytochrome c oxidase subunit III [Schistosoma mansoni] gb AAG13163.2  (AF216698) cytochrome c oxidase subunit 3 [Schistosoma mansoni]	6.6
4758	10835218	gi 10835218 ref NP_004609.1  topoisomerase (DNA) III alpha [Homo sapiens] ref XP_008635.1  topoisomerase (DNA) III alpha [Homo sapiens] sp Q13472 TP3A_HUMAN DNA TOPOISOMERASE III ALPHA gb AAB03694.1  (U43431) DNA topoisomerase III [Homo sapiens]	9.4
4759	9294528	gi 9294528 dbj BAB02791.1  (AB024034) gb AAF50915.1~gene_id:MDC11.5~similar to unknown protein [Arabidopsis thaliana]	7.1
4760	6624755	gi 6624755 emb CAB63872.1  (AJ251846) OTX5b protein [Xenopus laevis]	8.8

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
4762	14768465	gi 14768465 ref XP_038469.1  hypothetical protein XP_038469 [Homo sapiens]	0.88
4768	7290081	gi 7290081 gb AAF45547.1  (AE003418) fz3 gene product [alt 2] [Drosophila melanogaster]	4.7
4770	13358052	gi 13358052 ref NP_078326.1  unique hypothetical membrane lipoprotein [Ureaplasma urealyticum] pir H82883 hypothetical protein UU489 [imported] - Ureaplasma urealyticum gb AAF30901.1 AE002147_2 (AE002147) unique hypothetical membrane lipoprotein [Ureaplasma urealyticum]	0.95
4774	12698025	gi 12698025 dbj BAB21831.1  (AB051527) KIAA1740 protein [Homo sapiens]	0.24
4784	116910	gi 116910 sp P10169 CON8_NEUCR CONIDIATION-SPECIFIC PROTEIN 8 pir S02210 con-8 protein - Neurospora crassa emb CAA30092.1  (X07040) con-8 [Neurospora crassa]	4.3
4788	3694664	gi 3694664 gb AAC62434.1  (AC004893) similar to NEDD-4 (KIA0093); similar to P46934 (PID:g1171682) [Homo sapiens]	8.2
4790	1731439	gi 1731439 sp P51505 ZN80_MACMU ZINC FINGER PROTEIN 80 emb CAA61771.1  (X89629) znf80 [Macaca mulatta]	1.3
4794	11257183	gi 11257183 pir F82319 transketolase 1 VC0473 [imported] - Vibrio cholerae (group O1 strain N16961) gb AAF93646.1  (AE004133) transketolase 1 [Vibrio cholerae]	9.1
4795	11466520	gi 11466520 ref NP_044769.1  SecY-type transporter protein [Reclinomonas americana] pir S78151 secY protein homolog - Reclinomonas americana (ATCC 50394) mitochondrion gb AAD11884.1  (AF007261) SecY-type transporter protein [Reclinomonas americana]	2.3
4799	5869811	gi 5869811 emb CAB55552.1  (AJ243538) Fox2 protein [Glomus mosseae]	8.5

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
4801	6324187	gi 6324187 ref NP_014257.1  Ammonia transport protein; Mep2p [Saccharomyces cerevisiae] sp P41948 MEP2_YEAST AMMONIUM TRANSPORTER MEP2 pir S51089 ammonium transport protein MEP2 - yeast (Saccharomyces cerevisiae) emb CAA58587.1  (X83608) ammonium transporter [Saccharomyces cerevisiae] emb CAA86884.1  (Z46843) NH3 permease [Saccharomyces cerevisiae] emb CAA96025.1  (Z71418) ORF YNL142w [Saccharomyces cerevisiae]	8.3
4805	14738182	gi 14738182 ref XP_038231.1  KIAA0793 gene product [Homo sapiens]	3E-16
4806	481861	gi 481861 pir S39796 aggrecan precursor - chicken	0.065
4808	462116	gi 462116 sp Q05394 FMLR_RABIT FMET-LEU-PHE RECEPTOR (FMLP RECEPTOR) (N-FORMYL PEPTIDE RECEPTOR) (FPR) (N-FORMYLPEPTIDE CHEMOATTRACTANT RECEPTOR) pir A46520 N-formyl peptide receptor - rabbit gb AAA31254.1  (M94549) N-formyl peptide receptor [Oryctolagus cuniculus]	2.2
4809	12832739	gi 12832739 dbj BAB22236.1  (AK002621) putative [Mus musculus]	1.1
4813	464359	gi 464359 sp P33295 PEPC_ASPNG SUBTILISIN-LIKE SERINE PROTEASE PEPC PRECURSOR pir JU0146 serine proteinase (EC 3.4.21.-) precursor - Aspergillus niger gb AAA32702.1  (M96758) serine protease [Aspergillus niger]	0.91
4814	14741436	gi 14741436 ref XP_032168.1  hypothetical protein XP_032168 [Homo sapiens]	1.3
4821	6322061	gi 6322061 ref NP_012136.1  Yil130wp [Saccharomyces cerevisiae] sp P40467 YIN0_YEAST PUTATIVE 108.8 KD TRANSCRIPTIONAL REGULATORY PROTEIN IN FKH1-STH1 INTERGENIC REGION pir S48404 probable membrane protein YIL130w - yeast (Saccharomyces cerevisiae) emb CAA86148.1  (Z38059) orf, len: 964, CAI: 0.15, possible regulatory protein [Saccharomyces cerevisiae]	6.7
4822	14784569	gi 14784569 ref XP_016395.2  11729 [Homo sapiens]	5E-26

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
4825	13926079	gi 13926079 gb AAK49526.1 AF356082_1 (AF356082) C2H2 zinc finger transcription factor JING [Drosophila melanogaster]	2.7
4827	1209370	gi 1209370 gb AAA91081.1  (L33971) EBV BKRF4 homologue [Leporid herpesvirus 1]	8
4829	11359537	gi 11359537 pir  T51023 hypothetical protein B7F21.40 [imported] - Neurospora crassa emb CAB97476.1  (AL389901) conserved hypothetical protein [Neurospora crassa]	0.57
4832	13629392	gi 13629392 sp P97523 MET_RAT HEPATOCYTE GROWTH FACTOR RECEPTOR PRECURSOR (MET PROTO-ONCOGENE TYROSINE KINASE) (C-MET) (HGF RECEPTOR) (HGF-SF RECEPTOR) emb CAA65582.1  (X96786) c-met [Rattus norvegicus]	1.3
4834	4508019	gi 4508019 ref NP_003449.1  bassoon (presynaptic cytomatrix protein); neuronal double zinc finger protein; zinc finger protein 231 [Homo sapiens] gb AAC83555.1  (AF052224) neuronal double zinc finger protein [Homo sapiens]	1.5
4835	5734374	gi 5734374 emb CAB52680.1  (AJ133723) Ran-binding protein 2 [Bos taurus]	4.7
4837	3281932	gi 3281932 emb CAA76796.1  (Y17584) beta-lactamase class A [Escherichia coli] emb CAC43180.1  (AJ277416) TEM-29 ES-beta-lactamase [Escherichia coli]	9.4
4839	15021417	gi 15021417 gb AAK77694.1 AF369029_25 (AF369029) ORF25, gene family 4 [white spot syndrome virus]	9.4
4841	7507283	gi 7507283 pir  T32024 hypothetical protein T06D4.4 - Caenorhabditis elegans gb AAB66123.1  (AF016673) similar to endothelin-converting enzymes [Caenorhabditis elegans]	6.7
4843	1165132	gi 1165132 emb CAA64491.1  (X95193) homeobox-leucine zipper protein [Pimpinella brachycarpa]	8.5

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
4845	11466755	gi 11466755 ref NP_039351.1  ORF191 [Marchantia polymorpha] sp P06266 NU6C_MARPO NADH-PLASTOQUINONE OXIDOREDUCTASE CHAIN 6, CHLOROPLAST pir DELVN6 NADH dehydrogenase (ubiquinone) (EC 1.6.5.3) chain 6 - liverwort (Marchantia polymorpha) chloroplast emb CAA28137.1  (X04465) ORF191 [Marchantia polymorpha]	9.5
4849	14010605	gi 14010605 gb AAK52051.1 AF363973_1 (AF363973) semaphorin 6C [Mus musculus]	6.3
4853	14755906	gi 14755906 ref XP_044358.1  similar to cleft lip and palate associated transmembrane protein 1 (H. sapiens) [Homo sapiens]	2.7
4859	13647785	gi 13647785 ref XP_018036.1  hypothetical protein FLJ13166 [Homo sapiens] ref XP_051378.1  similar to hypothetical protein FLJ13166 (H. sapiens) [Homo sapiens]	6.1
4866	11994373	gi 11994373 dbj BAB02332.1  (AB019229) gene_id:MDC16.14~unknown protein [Arabidopsis thaliana]	4.7
4872	12514590	gi 12514590 gb AAG55801.1 AE005316_6 (AE005316) orf, hypothetical protein [Escherichia coli O157:H7. EDL933] dbj BAB34856.1  (AP002555) hypothetical protein [Escherichia coli O157:H7]	6
4873	14017847	gi 14017847 dbj BAB47444.1  (AB058718) KIAA1815 protein [Homo sapiens]	6E-18
4878	7506698	gi 7506698 pir T24214 hypothetical protein R134.2 - Caenorhabditis elegans	7.3
4880	7505750	gi 7505750 pir T23590 hypothetical protein K10H10.1 - Caenorhabditis elegans emb CAB05777.1  (Z83236) contains similarity to Pfam domain: PF00083 (Sugar (and other) transporter), Score=-89.7, E-value=0.00037, N=1~cDNA EST yk503h12.5 comes from this gene~cDNA EST yk653a11.3 comes from this gene~cDNA EST yk653a11.5 comes from this gene [Caenorha>	1.4
4882	2500112	gi 2500112 sp P71359 RECQ_HAEIN ATP-DEPENDENT DNA HELICASE RECQ gb AAC22387.1  (U32756) ATP-dependent DNA helicase (recQ) [Haemophilus influenzae Rd]	8.7

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
4883	13447070	gi 13447070 gb AAK26617.1  (AF340025) NADH dehydrogenase subunit V [Coturnix chinensis]	3.1
4886	14775307	gi 14775307 ref XP_042250.1  similar to nuclear pore complex interacting protein (H. sapiens) [Homo sapiens]	4.2
4888	6434530	gi 6434530 emb CAB61080.1  (AL132949) predicted using Genefinder~cDNA EST yk51g5.3 comes from this gene~cDNA EST yk62d6.3 comes from this gene~cDNA EST yk51g5.5 comes from this gene~cDNA EST yk62d6.5 comes from this gene~cDNA EST yk105f8.5 comes from this gene~cDNA EST yk99f8.3 >	0.28
4896	12832739	gi 12832739 dbj BAB22236.1  (AK002621) putative [Mus musculus]	1.1
4903	11281764	gi 11281764 pir C81739 conserved hypothetical protein TC0120 [imported] - Chlamydia muridarum (strain Nigg) gb AAF38998.1  (AE002279) conserved hypothetical protein [Chlamydia muridarum]	2.7
4908	12838194	gi 12838194 dbj BAB24118.1  (AK005558) putative [Mus musculus]	1.7
4911	12721131	gi 12721131 gb AAK02908.1  (AE006121) unknown [Pasteurella multocida]	8.3
4913	10638457	gi 10638457 emb CAC12644.1  (AL136442) bA25J23.1 (KIAA1165 protein, similar to Drosophila CG8056 protein) [Homo sapiens]	1E-18
4916	11346431	gi 11346431 pir T47803 mitogen-activated protein kinase-like protein - Arabidopsis thaliana emb CAB75798.1  (AL138647) mitogen-activated protein kinase-like protein [Arabidopsis thaliana]	4



Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
4924	14758601	gi 14758601 ref XP_010183.3  protein phosphatase, EF hand calcium-binding domain 1 [Homo sapiens] ref XP_040201.1  protein phosphatase, EF hand calcium-binding domain 1 [Homo sapiens] ref XP_040202.1  protein phosphatase, EF hand calcium-binding domain 1 [Homo sapiens] sp O14829 PPE1_HUMAN SERINE/THREONINE PROTEIN PHOSPHATASE WITH EF-HANDS-1 (PPEF-1) (PROTEIN PHOSPHATASE WITH EF CALCIUM-BINDING DOMAIN) (PPEF) (SERINE/THREONINE PROTEIN PHOSPHATASE 7) (PP7) gb AAB82795.1  (AF023455) protein phosphatase with EF-hands-1 [Homo sapiens] gb AAC05825.1  (AF027977) serine/threonine protein phosphatase 7 catalytic subunit [Homo sapiens]	0.08
4932	12007365	gi 12007365 gb AAG45157.1 AF316823_1 (AF316823) cellulase Cel9-H [Clostridium cellulolyticum]	3.2
4933	8745051	gi 8745051 emb CAB95305.1  (AL359781) dynein heavy chain, cytosolic [Leishmania major]	8
4934	7499345	gi 7499345 pir  T21083 hypothetical protein F18A11.4 - Caenorhabditis elegans emb CAB04136.1  (Z81507) cDNA EST yk651h1.5 comes from this gene [Caenorhabditis elegans] emb CAA21639.1  (AL032639) cDNA EST yk651h1.5 comes from this gene [Caenorhabditis elegans]	0.4
4935	14133229	gi 14133229 dbj BAA76843.2  (AB023216) KIAA0999 protein [Homo sapiens]	0.91
4936	5835447	gi 5835447 ref NP_008371.1 ND6_13186 NADH dehydrogenase subunit 6 [Onchocerca volvulus] pir  T11066 NADH dehydrogenase (ubiquinone) (EC 1.6.5.3) chain 6 - nematode (Onchocerca volvulus) mitochondrion gb AAC61613.1  (AF015193) NADH dehydrogenase subunit 6 [Onchocerca volvulus]	2.8
4940	6978439	gi 6978439 ref NP_036622.1  acrosin [Rattus norvegicus] emb CAA41441.2  (X58550) preproacrosin [Rattus sp.]	9.1

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
4946	11349140	gi 11349140 pir G83492 hypothetical protein PA1232 [imported] - Pseudomonas aeruginosa (strain PAO1) gb AAG04621.1 AE004552_11 (AE004552) hypothetical protein [Pseudomonas aeruginosa]	1
4950	12862434	gi 12862434 dbj BAB32470.1  (AB047280) Pol-like protein Pol-2 [Tricholoma matsutake]	4.6
4956	15011489	gi 15011489 gb AAK77584.1 AF396436_24 (AF396436) heme maturase [Tetrahymena thermophila]	2.8
4958	1944163	gi 1944163 dbj BAA19637.1  (AB002668) unnamed protein product [Actinobacillus actinomycetemcomitans]	0.84
4966	7522108	gi 7522108 pir T29097 pro-pol-dUTPase polypeptide - murine endogenous retrovirus ERV-L (fragment) emb CAA73251.1  (Y12713) protease; reverse transcriptase; RNaseH; integrase; dUTPase; Pro-Pol-dUTPase polypeptide [Mus musculus]	0.0005
4968	12963743	gi 12963743 ref NP_076085.1  equilibrative nucleoside transporter 3 [Mus musculus] gb AAK00957.1 AF326986_1 (AF326986) equilibrative nucleoside transporter 3 [Mus musculus]	9.3
4971	6503300	gi 6503300 gb AAF14676.1 AC011713_24 (AC011713) Contains PF01535 Domain of unknown function. [Arabidopsis thaliana]	3.1
4976	7498863	gi 7498863 pir T20730 hypothetical protein F10G8.8 - Caenorhabditis elegans emb CAB02286.2  (Z80216) Weak similarity with intermediate filament protein (TREMBL id G633240), contains similarity to Pfam domain: PF00169 (PH domain), Score=79.3, E-value=2.7e-21, N=2~cDNA EST EMBL:T01262 comes from this gene~cDNA EST yk23d5.3 comes from this gene~> emb CAA19441.2  (AL023823) Weak similarity with intermediate filament protein (TREMBL id G633240), contains similarity to Pfam domain: PF00169 (PH domain), Score=79.3, E-value=2.7e-21, N=2~cDNA EST EMBL:T01262 comes from this gene~cDNA EST yk23d5.3 comes from this gen>	7

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
4981	436923	gi 436923 gb AAA62274.1  (U01849) ORF1 [Trypanosoma brucei]	1.2
4982	2827416	gi 2827416 gb AAB99843.1  (AF043083) glycoprotein B [human herpesvirus 5]	9.1
4989	11135234	gi 11135234 sp P57642 SYK3_BUCAI PUTATIVE LYSYL-TRNA SYNTHETASE (LYSINE--TRNA LIGASE) (LYSRS) (GX) dbj BAB13271.1  (AP001119) hypothetical lysyl-tRNA synthetase homolog [Buchnera sp. APS]	1.4
4990	2129953	gi 2129953 pir JC5229 laccase (EC 1.10.3.2) precursor common tobacco gb AAC49536.1  (U43542) diphenol oxidase [Nicotiana tabacum]	9.1
4995	13786443	gi 13786443 gb AAK39568.1 AC025296_3 (AC025296) hypothetical protein [Oryza sativa]	0.83
4998	7494262	gi 7494262 pir T18489 hypothetical protein C0820w - malaria parasite (Plasmodium falciparum) emb CAB11128.1  (Z98551) hypothetical protein, PFC0820w [Plasmodium falciparum]	0.81
5000	10121788	gi 10121788 gb AAG13373.1  (AF268180) polyprotein [bovine viral diarrhea virus type 2]	7.4
5007	6906704	gi 6906704 dbj BAA90553.1  (AB032551) proline-rich inositol polyphosphate 5-phosphatase [Rattus norvegicus]	1.6
5008	8978523	gi 8978523 dbj BAA98360.1  (AP002545) CT147 hypothetical protein [Chlamydomonas reinhardtii]	7.4
5009	9630127	gi 9630127 ref NP_046554.1  putative lipoprotein [Bacteriophage SPBc2] pir T12766 probable lipoprotein yokB - Bacillus subtilis phage SPBc2 emb CAB14083.1  (Z99115) yokB [Bacillus subtilis] gb AAC12975.1  (AF020713) putative lipoprotein [Bacteriophage SPBc2]	2.7
5011	8978523	gi 8978523 dbj BAA98360.1  (AP002545) CT147 hypothetical protein [Chlamydomonas reinhardtii]	7.4
5012	13636469	gi 13636469 ref XP_016747.1  latent transforming growth factor beta binding protein 1 precursor [Homo sapiens]	1.7
5016	3694664	gi 3694664 gb AAC62434.1  (AC004893) similar to NEDD-4 (KIA0093); similar to P46934 (PID:g1171682) [Homo sapiens]	7.9
5020	14751816	gi 14751816 ref XP_034239.1  hypothetical protein XP_034239 [Homo sapiens]	0.064

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5022	4768840	gi 4768840 gb AAD29638.1 AF117611_1 (AF117611) DosA protein [Dictyostelium discoideum]	9.9
5023	7442182	gi 7442182 pir T04989 pathogenesis-related protein 1 precursor, 19.3K - Arabidopsis thaliana emb CAA20585.1  (AL031394) pathogenesis-related protein 1 precursor, 19.3K [Arabidopsis thaliana] emb CAB80089.1  (AL161584) pathogenesis-related protein 1 precursor, 19.3K [Arabidopsis thaliana] gb AAG40056.1 AF324705_1 (AF324705) AT4g33720 [Arabidopsis thaliana] gb AAG42009.1 AF327419_1 (AF327419) putative pathogenesis-related protein 1 precursor protein [Arabidopsis thaliana] gb AAK00381.1 AF339699_1 (AF339699) putative pathogenesis-related protein 1 precursor protein [Arabidopsis thaliana] gb AAK62632.1  (AY039577) AT4g33720/T16L1_210 [Arabidopsis thaliana]	9.3
5029	4884674	gi 4884674 gb AAD31763.1 AF121945_1 (AF121945) aldehyde oxidase [Mus musculus]	7.9
5031	2133751	gi 2133751 pir S66610 sulfakinin - bluebottle fly (Calliphora vomitoria) prf 2120269A sulfakinin [Calliphora vomitoria]	9
5033	975667	gi 975667 emb CAA61500.1  (X89213) RNA polymerase [Infectious hematopoietic necrosis virus] prf 2121413F RNA polymerase [Infectious hematopoietic necrosis virus]	4.1
5035	11267434	gi 11267434 pir F82853 DNA helicase II XF0050 [imported] - Xylella fastidiosa (strain 9a5c) gb AAF82863.1 AE003859_4 (AE003859) DNA helicase II [Xylella fastidiosa 9a5c]	3.1
5036	11994373	gi 11994373 dbj BAB02332.1  (AB019229) gene_id:MDC16.14~unknown protein [Arabidopsis thaliana]	4.8
5050	1082778	gi 1082778 pir A56395 secretory phospholipase A2 receptor precursor, transmembrane form - human gb AAA70110.1  (U17033) 180 kDa transmembrane PLA2 receptor precursor [Homo sapiens]	3.5

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5051	13518480	gi 13518480 ref NP_084839.1  hypothetical protein [Lotus japonicus] ref NP_084856.1  hypothetical protein [Lotus japonicus] dbj BAB33238.1  (AP002983) hypothetical protein [Lotus japonicus] dbj BAB33256.1  (AP002983) hypothetical protein [Lotus japonicus]	5
5065	7460247	gi 7460247 pir B71612 hypothetical protein PFB0555c - malaria parasite (Plasmodium falciparum) gb AAC71900.1  (AE001402) hypothetical protein [Plasmodium falciparum]	7.1
5069	13486795	gi 13486795 dbj BAB40028.1  (AP003021) hypothetical protein [Oryza sativa]	2.6
5072	6166049	gi 6166049 sp O55017 CCAB_MOUSE VOLTAGE-DEPENDENT N-TYPE CALCIUM CHANNEL ALPHA-1B SUBUNIT (CALCIUM CHANNEL, L TYPE, ALPHA-1 POLYPEPTIDE ISOFORM 5) (BRAIN CALCIUM CHANNEL III) (BIII) gb AAB97840.1  (AF042317) neuronal type calcium channel alpha-1 subunit [Mus musculus]	1.2
5074	7495367	gi 7495367 pir T33395 hypothetical protein C04F2.1 - Caenorhabditis elegans gb AAC26911.1  (AF078780) Similar to chemoreceptor; C04F2.1 [Caenorhabditis elegans]	3.1
5075	9507739	gi 9507739 ref NP_061405.1  23 pct identical(9 gaps) to 343 residues of 1286 aa protein sp:AIDA_ECOLI[Adhesin AidA-I precursor] [Plasmid F] dbj BAA97896.1  (AP001918) 23 pct identical(9 gaps) to 343 residues of 1286 aa protein sp:AIDA_ECOLI[Adhesin AidA-I precursor] [Plasmid F]	9.7
5076	7495508	gi 7495508 pir T18993 hypothetical protein C06B8.1 - Caenorhabditis elegans emb CAB03850.1  (Z81463) Similarity to C.elegans zinc finger proteins, contains similarity to Pfam domain: PF00104 (Ligand-binding domain of nuclear hormone receptor), Score=-13.7, E-value=0.051, N=1 [Caenorhabditis elegans]	4.2
5077	14018037	gi 14018037 ref NP_114377.1  ATP synthase F0 subunit 6 [Hymenolepis diminuta] gb AAK51337.1 AF314223_9 (AF314223) ATP synthase subunit 6 [Hymenolepis diminuta]	4.9

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5086	6562005	gi 6562005 emb CAB62499.1  (AJ250586) chitinase [Arthrobacter sp.]	1.5
5087	9631327	gi 9631327 ref NP_048161.1  ORF MSV090 putative Molluscum contagiosum virus MC121L (vaccinia A16L) homolog, similar to GB:U60315 [Melanoplus sanguinipes entomopoxvirus] pir T28251 ORF MSV090 probable Molluscum contagiosum virus MC121L (vaccinia A16L) homolog - Melanoplus sanguinipes entomopoxvirus gb AAC97640.1  (AF063866) ORF MSV090 putative Molluscum contagiosum virus MC121L (vaccinia A16L) homolog, similar to GB:U60315 [Melanoplus sanguinipes entomopoxvirus]	8.7
5088	4321813	gi 4321813 gb AAD15835.1  (AF063236) variant 2 major surface glycoprotein [Pneumocystis carinii]	6.5
5089	12853765	gi 12853765 dbj BAB29840.1  (AK015427) putative [Mus musculus]	0.0003
5094	732059	gi 732059 sp P39372 YJHA_ECOLI HYPOTHETICAL 28.3 KDA PROTEIN IN FECI-FIMB INTERGENIC REGION PRECURSOR pir S56536 hypothetical protein f241 (fecI-fimB intergenic region) - Escherichia coli gb AAA97207.1  (U14003) ORF_f241 [Escherichia coli] gb AAC77267.1  (AE000501) orf, hypothetical protein [Escherichia coli K12] gb AAG59493.1 AE005662_5 (AE005662) orf, hypothetical protein [Escherichia coli O157:H7 EDL933] dbj BAB38693.1  (AP002569) hypothetical protein [Escherichia coli O157:H7]	1.4
5095	84124	gi 84124 pir B24785 hypothetical protein 1028 - slime mold (Dictyostelium discoideum) transposon DIRS-1 (fragment)	2.9
5096	84043	gi 84043 pir C22845 NADH dehydrogenase (ubiquinone) (EC 1.6.5.3) chain 4 - Trypanosoma brucei mitochondrion	2.3
5100	5441886	gi 5441886 dbj BAA82384.1  (AP000367) EST AU069246(C53478) corresponds to a region of the predicted gene.; hypothetical protein [Oryza sativa]	4.9

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5102	6678810	gi 6678810 ref NP_032581.1  mannan-binding lectin serine protease 1 [Mus musculus] sp P98064 CRAR_MOUSE COMPLEMENT-ACTIVATING COMPONENT OF RA-REACTIVE FACTOR PRECURSOR (RA-REACTIVE FACTOR SERINE PROTEASE P100) (RARF) (MANNAN-BINDING LECTIN SERINE PROTEASE 1) dbj BAA03944.1  (D16492) P100 serine protease of Ra-reactive factor (RaRF) [Mus musculus]	7.3
5106	13357651	gi 13357651 ref NP_077925.1  unique hypothetical membrane lipoprotein [Ureaplasma urealyticum] pir G82934 hypothetical protein UU094 [imported] - Ureaplasma urealyticum gb AAF30500.1 AE002109_3 (AE002109) unique hypothetical membrane lipoprotein [Ureaplasma urealyticum]	2.4
5108	2499547	gi 2499547 sp P77153 WZB_ECOLI PROBABLE LOW MOLECULAR WEIGHT PROTEIN-TYROSINE-PHOSPHATASE WZB pir D64972 probable protein-tyrosine-phosphatase (EC 3.1.3.48) wzb, low molecular weight - Escherichia coli gb AAC77834.1  (U38473) putative acid phosphatase [Escherichia coli] gb AAC75122.1  (AE000296) probable protein-tyrosine-phosphatase [Escherichia coli K12] gb AAG57121.1 AE005432_2 (AE005432) probable protein-tyrosine-phosphatase [Escherichia coli O157:H7 EDL933] dbj BAB36289.1  (AP002560) probable protein-tyrosine-phosphatase [Escherichia coli O157:H7]	1.4
5109	5292165	gi 5292165 gb AAB01085.2  (U34402) single-subunit RNA polymerase C [Triticum aestivum]	2.9
5112	2598890	gi 2598890 dbj BAA23297.1  (D86277) VP7 [Human rotavirus 3]	0.52
5115	7301702	gi 7301702 gb AAF56815.1  (AE003767) wdn gene product [Drosophila melanogaster]	2
5116	12853765	gi 12853765 dbj BAB29840.1  (AK015427) putative [Mus musculus]	0.0003
5121	4009428	gi 4009428 gb AAD11553.1  (AF019894) replication protein A [Helicobacter pylori]	4.2
5128	12849716	gi 12849716 dbj BAB28451.1  (AK012761) putative [Mus musculus]	7.3

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5129	7496182	gi 7496182 pir T19344 hypothetical protein C17D12.4 - <i>Caenorhabditis elegans</i> emb CAB03892.1  (Z81473) predicted using Genefinder [ <i>Caenorhabditis elegans</i> ]	5.7
5130	9634540	gi 9634540 ref NP_038078.1  TA35L [ <i>Vaccinia virus</i> (strain Tian Tan)] gb AAF34031.1  (AF095689) TA35L [ <i>Vaccinia virus</i> (strain Tian Tan)]	9.5
5136	12045115	gi 12045115 ref NP_072926.1  lipoprotein, putative [ <i>Mycoplasma genitalium</i> ] sp P47502 Y260_MYCGE HYPOTHETICAL LIPOPROTEIN MG260 PRECURSOR pir G64228 hypothetical protein homolog MG260 - <i>Mycoplasma genitalium</i> gb AAC71481.1  (U39705) lipoprotein, putative [ <i>Mycoplasma genitalium</i> ]	3.3
5138	2144796	gi 2144796 pir I36912 involucrin S - <i>douroucouli</i> (fragment) gb AAA35376.1  (M25314) involucrin (small allele) [ <i>Aotus trivirgatus</i> ]	4.3
5140	7509951	gi 7509951 pir T33900 hypothetical protein Y48A5A.1 - <i>Caenorhabditis elegans</i> gb AAD12829.1  (AF125455) Y48A5A.1 gene product [ <i>Caenorhabditis elegans</i> ]	1.3
5143	13701664	gi 13701664 dbj BAB42957.1  (AP003135) ORFID:SA1688~hypothetical protein, similar to teichoic acid translocation ATP-binding protein tagH [ <i>Staphylococcus aureus</i> subsp. <i>aureus</i> N315] dbj BAB58033.1  (AP003363) hypothetical protein [ <i>Staphylococcus aureus</i> subsp. <i>aureus</i> Mu50]	6.1
5147	7243223	gi 7243223 dbj BAA92659.1  (AB037842) KIAA1421 protein [ <i>Homo sapiens</i> ]	6E-96
5148	14771907	gi 14771907 ref XP_045594.1  hypothetical protein MGC4816 [ <i>Homo sapiens</i> ]	5E-30
5163	6056374	gi 6056374 gb AAF02838.1 AC009894_9 (AC009894) Similar to serine/threonine kinases [ <i>Arabidopsis thaliana</i> ]	9.5



Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5164	6322278	gi 6322278 ref NP_012352.1  mannosyltransferase complex component; Mnn11p [Saccharomyces cerevisiae] sp P46985 YJS3_YEAST HYPOTHETICAL 47.8 KD PROTEIN IN SWE1-ATP12 INTERGENIC REGION pir  S56966 probable membrane protein YJL183w - yeast (Saccharomyces cerevisiae) emb CAA89478.1  (Z49458) ORF YJL183w [Saccharomyces cerevisiae]	0.5
5168	14738479	gi 14738479 ref XP_027836.1  general transcription factor IIIC, polypeptide 4 (90kD) [Homo sapiens]	7
5169	4505321	gi 4505321 ref NP_003862.1  myelin transcription factor 2; cerebrin-50 [Homo sapiens] pir  I52374 cerebrin-50 - human gb AAB34231.1  (S76853) cerebrin-50=cerebrospinal fluid protein [human, cerebral brain, Peptide, 435 aa] [Homo sapiens]	5
5171	14336722	gi 14336722 gb AAK61254.1 AE006464_22 (AE006464) Similar to pre-pro-megakaryocyte potentiating factor precursor [Homo sapiens]	0.22
5173	13700778	gi 13700778 dbj BAB42074.1  (AP003132) ORFID:SA0834~hypothetical protein, similar to lipopolysaccharide modification acyltransferase [Staphylococcus aureus subsp. aureus N315] dbj BAB57136.1  (AP003360) hypothetical protein [Staphylococcus aureus subsp. aureus Mu50]	5.7
5174	8894607	gi 8894607 emb CAB94193.2  (AJ289710) envelope protein [HERV-H/env60]	0.0002
5176	14772400	gi 14772400 ref XP_045944.1  hypothetical protein XP_045944 [Homo sapiens]	2.5
5181	8248741	gi 8248741 gb AAB20211.2  (S61973) NMDA receptor glutamate-binding subunit [Rattus sp.]	7.4
5186	12329963	gi 12329963 emb CAC24680.1  (AL513062) possible high molecular mass nuclear antigen [Leishmania major]	9.7
5187	3915815	gi 3915815 sp Q45032 PRIA_BORBU PRIMOSOMAL PROTEIN N' (REPLICATION FACTOR Y) pir  F70101 primosomal protein N (priA) homolog - Lyme disease spirochete gb AAC66393.1  (AE001115) primosomal protein N (priA) [Borrelia burgdorferi]	0.86

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5191	7516796	gi 7516796 pir H72575 hypothetical protein APE1888 - Aeropyrum pernix (strain K1) dbj BAA80893.1  (AP000062) 107aa long hypothetical protein [Aeropyrum pernix]	9.9
5192	4691710	gi 4691710 gb AAD28038.1 AF119712_1 (AF119712) bone morphogenetic protein BMP2/4 [Lytechinus variegatus]	4.5
5198	10639274	gi 10639274 emb CAC11276.1  (AL445063) amylopullulanase related protein [Thermoplasma acidophilum]	2.4
5199	10998836	gi 10998836 gb AAG26008.1 AF312017_1 (AF312017) beta-glucosidase precursor [Tenebrio molitor]	3.1
5205	7657228	gi 7657228 ref NP_055258.1  interleukin 17B [Homo sapiens] ref XP_003898.3  50367 [Homo sapiens] ref XP_046987.1  interleukin 17B [Homo sapiens] ref XP_046984.1  interleukin 17B [Homo sapiens] ref XP_046985.1  interleukin 17B [Homo sapiens] ref XP_046986.1  50372 [Homo sapiens] gb AAF01318.1 AF184969_1 (AF184969) cytokine-like protein ZCYTO7 [Homo sapiens] gb AAF28104.1 AF152098_1 (AF152098) interleukin 17B [Homo sapiens] gb AAF78775.1 AF212311_1 (AF212311) interleukin 20 [Homo sapiens] gb AAG39637.1 AF110385_1 (AF110385) interleukin-17 beta; IL-17 beta [Homo sapiens] gb AAG44136.1 AF218727_1 (AF218727) neuronal interleukin-17 related factor [Homo sapiens] gb AAK60336.1 AF386077_1 (AF386077) interleukin 17B [Homo sapiens]	5.5
5207	12311878	gi 12311878 emb CAC22694.1  (AL389894) hypothetical protein L779.02 [Leishmania major]	1.6

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5208	7657683	gi 7657683 ref NP_055146.1  solute carrier family 7, (cationic amino acid transporter, y <sup>+</sup> system) member 11; cystine/glutamate transporter [Homo sapiens] sp Q9UPY5 XCT_HUMAN CYSTINE/GLUTAMATE TRANSPORTER (AMINO ACID TRANSPORT SYSTEM XC-) (XCT) dbj BAA82628.1  (AB026891) cystine/glutamate transporter [Homo sapiens] gb AAG35592.1 AF200708_1 (AF200708) calcium channel blocker resistance protein CCB1 [Homo sapiens] gb AAK49111.1 AF252872_1 (AF252872) cystine/glutamate transporter xCT [Homo sapiens]	2.2
5212	2388574	gi 2388574 gb AAB71455.1  (AC000098) Strong similarity to Phalaenopsis homeobox protein (gb U34743). [Arabidopsis thaliana]	7
5221	14740481	gi 14740481 ref XP_045136.1  similar to cadherin related 23 (H. sapiens) [Homo sapiens]	1E-18
5222	12852452	gi 12852452 dbj BAB29417.1  (AK014534) putative [Mus musculus]	8E-21
5224	2119250	gi 2119250 pir I38857 microtubule-associated protein 1A - human gb AAA81362.1  (U14577) microtubule-associated protein 1A [Homo sapiens]	0.99
5226	1304610	gi 1304610 gb AAC59915.1  (U41783) cytochrome b [Cynolebias affinis]	4.7
5227	12311878	gi 12311878 emb CAC22694.1  (AL389894) hypothetical protein L779.02 [Leishmania major]	1.3
5228	6650047	gi 6650047 gb AAF21692.1 AF051987_1 (AF051987) maturase K [Hyobanche sanguinea]	1.9
5232	3859671	gi 3859671 emb CAA22009.1  (AL033502) hypothetical protein [Candida albicans]	0.0009
5240	9963891	gi 9963891 gb AAG09748.1 AF233276_1 (AF233276) peroxin-1 [Penicillium chrysogenum]	9.3
5242	3024924	gi 3024924 sp Q58315 Y905_METJA HYPOTHETICAL PROTEIN MJ0905 pir A64413 hypothetical protein MJ0905 - Methanococcus jannaschii gb AAB98915.1  (U67534) M. jannaschii predicted coding region MJ0905 [Methanococcus jannaschii]	1.8
5245	11279021	gi 11279021 pir T47996 hypothetical protein F21F14.210 - Arabidopsis thaliana emb CAB71911.1  (AL138642) putative protein [Arabidopsis thaliana]	5.2

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5255	2746323	gi 2746323 gb AAB97896.1  (AF037166) major surface glycoprotein [ <i>Leishmania panamensis</i> ]	2.2
5260	7506750	gi 7506750 pir T16770 hypothetical protein R153.2 - <i>Caenorhabditis elegans</i> gb AAA68293.1  (U28729) Hypothetical protein R153.2 [ <i>Caenorhabditis elegans</i> ]	4.1
5264	14737112	gi 14737112 ref XP_046972.1  hypothetical protein XP_046972 [ <i>Homo sapiens</i> ]	3.4
5266	7432465	gi 7432465 pir T13677 NADH dehydrogenase (ubiquinone) (EC 1.6.5.3) chain 5 - <i>Santolina chamaecyparissus</i> chloroplast gb AAC37776.1  (L39444) NADH dehydrogenase [ <i>Santolina chamaecyparissus</i> ]	8.1
5267	9845030	gi 9845030 dbj BAB11914.1  (AB034726) 5-oxoprolinase precursor [ <i>Alcaligenes faecalis</i> ]	6.8
5268	7429144	gi 7429144 pir GNMSLL retrovirus-related reverse transcriptase homolog - mouse retrotransposon gb AAA66024.1  (M13002) 2855 is the position of the first start codon in ORF 2; putative [ <i>Mus musculus</i> ]	0.0003
5269	6689319	gi 6689319 emb CAB65444.1  (AJ238583) penicillin binding protein 2x [ <i>Streptococcus pneumoniae</i> ]	0.37
5274	7522099	gi 7522099 pir T28658 polyketide synthase - <i>Sorangium cellulosum</i> (fragment)	3.9
5278	13786182	gi 13786182 ref NP_112634.1  delta-6 fatty acid desaturase [ <i>Rattus norvegicus</i> ] pir JG0180 Delta6 fatty acid desaturase (EC 1.14.99.-) [imported] - rat dbj BAA75496.1  (AB021980) delta-6 fatty acid desaturase [ <i>Rattus norvegicus</i> ]	4E-12
5279	7674158	gi 7674158 sp O76942 PTP_ENCCU MAJOR POLAR TUBE PROTEIN PRECURSOR (MAJOR PTP) emb CAA06662.1  (AJ005666) polar tube protein [ <i>Encephalitozoon cuniculi</i> ]	1.2
5280	10726396	gi 10726396 gb AAF54288.2  (AE003680) CG11773 gene product [ <i>Drosophila melanogaster</i> ]	1.1
5282	14767779	gi 14767779 ref XP_007023.2  G protein-coupled receptor kinase-interactor 2 [ <i>Homo sapiens</i> ] gb AAD28047.1 AF124491_1 (AF124491) ARF GTPase-activating protein GIT2 [ <i>Homo sapiens</i> ]	4E-13
5284	14602920	gi 14602920 gb AAH09955.1 AAH09955 (BC009955) Unknown (protein for IMAGE:4297851) [ <i>Homo sapiens</i> ]	1.4

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5287	7487876	gi 7487876 pir T02741 hypothetical protein T9I4.19 - Arabidopsis thaliana gb AAC33237.1  (AC005315) putative ligand-gated ion channel protein [Arabidopsis thaliana]	9.9
5288	14423780	gi 14423780 sp O95013 O4F3_HUMAN OLFACTORY RECEPTOR 4F3 gb AAD05195.1  (AC004908) similar to rat olfactory receptor OR18; similar to S29710 (PID:g423702) [Homo sapiens]	0.000002
5290	14764967	gi 14764967 ref XP_049605.1  KIAA1467 protein [Homo sapiens]	0.00003
5291	7496712	gi 7496712 pir T15708 hypothetical protein C30B5.1 - Caenorhabditis elegans gb AAK31466.1  (U23450) Hypothetical protein C30B5.1 [Caenorhabditis elegans]	2.6
5292	4468835	gi 4468835 emb CAB38221.1  (AJ232783) hairless [Drosophila hydei]	1.3
5298	7481600	gi 7481600 pir T36589 probable transmembrane protein - Streptomyces coelicolor emb CAB42730.1  (AL049826) putative transmembrane protein [Streptomyces coelicolor A3(2)]	5.6
5301	4885323	gi 4885323 ref NP_005293.1  G protein-coupled receptor 37 (endothelin receptor type B-like); endothelin receptor type B-like; hET(B)R-LP [Homo sapiens] ref XP_004804.1  G protein-coupled receptor 37 (endothelin receptor type B-like) [Homo sapiens] ref XP_032150.1  58490 [Homo sapiens] ref XP_032151.1  G protein-coupled receptor 37 (endothelin receptor type B-like) [Homo sapiens] sp O15354 GP37_HUMAN PROBABLE G PROTEIN-COUPLED RECEPTOR GPR37 PRECURSOR (ENDOTHELIN B RECEPTOR-LIKE PROTEIN-1) (ETBR-LP-1) emb CAA73080.1  (Y12476) G protein coupled receptor 37 [Homo sapiens] gb AAD08853.1  (AC004925) G protein coupled receptor 37 [Homo sapiens]	1.9

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5304	11467524	gi 11467524 ref NP_043670.1  PSI, subunit III, plastocyanin-binding [Odontella sinensis] sp P49483 PSAF_ODOSI PHOTOSYSTEM I REACTION CENTRE SUBUNIT III (PSI-F) pir S78329 photosystem I chain III - Odontella sinensis chloroplast emb CAA91702.1  (Z67753) PSI, subunit III, plastocyanin-binding [Odontella sinensis]	6.2
5306	7292767	gi 7292767 gb AAF48162.1  (AE003489) CG15927 gene product [Drosophila melanogaster]	6.3
5309	14601766	gi 14601766 ref NP_148307.1  hypothetical protein [Aeropyrum pernix] pir C72501 hypothetical protein APE1985 - Aeropyrum pernix (strain K1) dbj BAA80995.1  (AP000063) 160aa long hypothetical protein [Aeropyrum pernix]	1.8
5310	13661965	gi 13661965 gb AAK38127.1 AC058781_4 (AC058781) L344.4 [Leishmania major]	7.1
5312	6320879	gi 6320879 ref NP_010958.1  Transcriptional activator of nitrogen-regulated genes; Gln3p [Saccharomyces cerevisiae] sp P18494 GLN3_YEAST NITROGEN REGULATORY PROTEIN GLN3 pir S50543 GLN3 protein - yeast (Saccharomyces cerevisiae) gb AAB64575.1  (U18796) Gln3p: Nitrogen regulatory protein [Saccharomyces cerevisiae]	8.5
5313	4493990	gi 4493990 emb CAB39049.1  (AL034559) hypothetical protein, PFC1045c [Plasmodium falciparum]	0.74
5314	10047245	gi 10047245 dbj BAB13411.1  (AB046805) KIAA1585 protein [Homo sapiens]	2E-69
5317	14762995	gi 14762995 ref XP_044123.1  cadherin 20, type 2 [Homo sapiens]	4E-17
5321	14773348	gi 14773348 ref XP_038450.1  20849 [Homo sapiens]	3E-45
5326	4691710	gi 4691710 gb AAD28038.1 AF119712_1 (AF119712) bone morphogenetic protein BMP2/4 [Lytechinus variegatus]	5.4
5328	13161382	gi 13161382 dbj BAB32977.1  (AB034197) lamin B3 [Carassius auratus]	6.9
5333	12654811	gi 12654811 gb AAH01248.1 AAH01248 (BC001248) hypothetical protein FLJ20272 [Homo sapiens]	6.2

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5334	4504455	gi 4504455 ref NP_000183.1  T-box 5 [Homo sapiens] emb CAA70592.1  (Y09445) transcription factor [Homo sapiens]	2.5
5337	6642649	gi 6642649 gb AAF20230.1 AC012395_17 (AC012395) putative glucan synthase [Arabidopsis thaliana]	1.7
5342	7330072	gi 7330072 gb AAF60061.1 AF210726_82 (AF210726) ORFRU4-R [Macaca mulatta rhadinovirus 26-95]	0.012
5344	90587	gi 90587 pir PS0135 H-2 class I histocompatibility antigen T7 - mouse (fragment) emb CAA34332.1  (X16213) MHC T7 class I antigen (64 AA) (119 is 2nd base in codon) [Mus musculus]	6.4
5345	14749813	gi 14749813 ref XP_041197.1  integrin, alpha 11 [Homo sapiens]	0.48
5348	2143962	gi 2143962 pir  I59422 rsec8 - rat (fragment) gb AAC52265.1  (U32498) rsec8 [Rattus norvegicus]	3E-96
5349	7549797	gi 7549797 ref NP_035731.1  T lymphoma oncogene [Mus musculus] sp P17408 TLM_MOUSE TLM PROTEIN (TLM ONCOGENE) pir  S10151 transforming protein tlm - mouse (strain balb/c) emb CAA36859.1  (X52634) tlm protein [Mus musculus]	1.9
5351	7505043	gi 7505043 pir  T33641 hypothetical protein K01A2.7 - Caenorhabditis elegans gb AAC69507.1  (AF099925) Hypothetical protein K01A2.7 [Caenorhabditis elegans]	0.71
5357	6677735	gi 6677735 ref NP_033084.1  ral guanine nucleotide dissociation stimulator [Mus musculus] sp Q03385 GNDS_MOUSE RAL GUANINE NUCLEOTIDE DISSOCIATION STIMULATOR (RALGEF) (RALGDS) pir  S28415 guanine nucleotide dissociation stimulator ralGDS - mouse gb AAA37714.1  (L07924) guanine nucleotide dissociation stimulator [Mus musculus]	4
5360	11499595	gi 11499595 ref NP_070837.1  coenzyme F390 synthetase (ftsA-3) [Archaeoglobus fulgidus] pir  D69501 coenzyme F390 synthetase (ftsA-3) homolog - Archaeoglobus fulgidus gb AAB89243.1  (AE000964) coenzyme F390 synthetase (ftsA-3) [Archaeoglobus fulgidus]	4.8

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5365	12383066	gi 12383066 ref NP_073737.1  hypothetical protein DKFZp586F1122 similar to axotrophin [Homo sapiens] ref XP_016117.2  hypothetical protein DKFZp586F1122 similar to axotrophin [Homo sapiens] dbj BAB14340.1  (AK022973) unnamed protein product [Homo sapiens]	8E-61
5368	7500833	gi 7500833 pir T21991 hypothetical protein F39B2.10 - Caenorhabditis elegans emb CAB07390.1  (Z92834) contains similarity to Pfam domain: PF00226 (DnaJ domain), Score=132.3, E-value=2.8e-36, N=1; PF00684 (DnaJ central domain (4 repeats)), Score=103.9, E-value=9.9e-28, N=1; PF01556 (DnaJ C terminal region), Score=35.8, E-value=1.5e-08, N=1~cDNA>	3.2
5370	11499595	gi 11499595 ref NP_070837.1  coenzyme F390 synthetase (ftsA-3) [Archaeoglobus fulgidus] pir D69501 coenzyme F390 synthetase (ftsA-3) homolog - Archaeoglobus fulgidus gb AAB89243.1  (AE000964) coenzyme F390 synthetase (ftsA-3) [Archaeoglobus fulgidus]	5.5
5371	11387290	gi 11387290 sp P57436 Y355_BUCAI PUTATIVE DEOXYRIBONUCLEASE BU355 dbj BAB13059.1  (AP001119) hypothetical protein [Buchnera sp. APS]	7.1
5374	8923462	gi 8923462 ref NP_060317.1  hypothetical protein FLJ20505 [Homo sapiens] dbj BAA91218.1  (AK000512) unnamed protein product [Homo sapiens]	5E-76
5376	7491381	gi 7491381 pir T39498 hypothetical protein SPBC1604.16c - fission yeast (Schizosaccharomyces pombe) emb CAA22349.1  (AL034433) hypothetical protein [Schizosaccharomyces pombe]	5.1
5378	5835229	gi 5835229 ref NP_008273.1 ND4_10703 NADH dehydrogenase subunit 4 [Protopterus dolloi] pir S68137 NADH dehydrogenase (ubiquinone) (EC 1.6.5.3) chain 4 - Protopterus dolloi mitochondrion gb AAC38030.1  (L42813) NADH dehydrogenase subunit 4 [Protopterus dolloi]	7.9
5381	12861366	gi 12861366 dbj BAB32182.1  (AK020701) putative [Mus musculus]	1E-20



Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5387	12957488	gi 12957488 ref NP_075463.1  putative gene product [Homo sapiens] emb CAB42442.1  (AL049784) hypothetical protein [Homo sapiens]	1E-23
5390	13621158	gi 13621158 ref NP_112433.1  NADH dehydrogenase subunit 1 [Tetradontophora bielanensis] gb AAK30952.1 AF272824_13 (AF272824) NADH dehydrogenase subunit 1 [Tetradontophora bielanensis]	8.5
5391	14720363	gi 14720363 ref XP_042844.1  similar to ALU SUBFAMILY SC SEQUENCE CONTAMINATION WARNING ENTRY (H. sapiens) [Homo sapiens]	5.5
5399	14916308	gi 14916308 gb AAK73874.1 U00067_3 (U00067) Hypothetical protein F54E7.3a [Caenorhabditis elegans]	7.6
5401	12856615	gi 12856615 dbj BAB30727.1  (AK017396) putative [Mus musculus]	1E-91
5406	625580	gi 625580 pir A49626 transregulatory protein IE-1 - Autographa californica nuclear polyhedrosis virus gb AAB29676.1  (S68091) IE-1=transregulatory protein [Autographa californica nuclear polyhedrosis virus AcNPV, tsB821, Peptide Mutant, 582 aa] [Autographa californica nucleopolyhedrovirus]	2.9
5408	7511058	gi 7511058 pir T27805 hypothetical protein ZK262.11 - Caenorhabditis elegans emb CAB16552.1  (Z99288) contains similarity to Pfam domain: PF01604 (7TM chemoreceptor), Score=138.5, E-value=3.8e-38, N=1 [Caenorhabditis elegans]	8
5412	5869818	gi 5869818 emb CAB55575.1  (AJ249395) NADH-ubiquinone oxidoreductase subunit 6 [Globodera pallida]	0.36
5413	7492086	gi 7492086 pir T41670 hypothetical zinc finger protein - fission yeast (Schizosaccharomyces pombe) emb CAA20703.1  (AL031530) hypothetical zinc finger protein; C3HC4 type (RING finger) family [Schizosaccharomyces pombe]	8.5
5416	6056374	gi 6056374 gb AAF02838.1 AC009894_9 (AC009894) Similar to serine/threonine kinases [Arabidopsis thaliana]	9.5

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5417	7464490	gi 7464490 pir E64666 hypothetical protein HP1173 - <i>Helicobacter pylori</i> (strain 26695) gb AAD08225.1  (AE000623) <i>H. pylori</i> predicted coding region HP1173 [ <i>Helicobacter pylori</i> 26695]	4
5418	13812393	gi 13812393 ref NP_113511.1  hypothetical protein [ <i>Guillardia theta</i> ] emb CAC27080.1  (AJ010592) hypothetical protein [ <i>Guillardia theta</i> ]	1.9
5420	6041669	gi 6041669 ref NP_004538.2  NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 4 (15kD, B15) [ <i>Homo sapiens</i> ] ref XP_002929.1  NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 4 (15kD, B15) [ <i>Homo sapiens</i> ] ref XP_041367.1  NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 4 (15kD, B15) [ <i>Homo sapiens</i> ] sp O95168 NB5M_HUMAN NADH-UBIQUINONE OXIDOREDUCTASE B15 SUBUNIT (COMPLEX I-B15) (CI-B15) pir JE0383 NADH dehydrogenase (ubiquinone) (EC 1.6.5.3) chain NDUFB4 - human gb AAD05421.1  (AF044957) NADH:ubiquinone oxidoreductase B15 subunit [ <i>Homo sapiens</i> ] gb AAH00855.1 AAH00855 (BC000855) NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 4 (15kD, B15) [ <i>Homo sapiens</i> ]	0.00002
5422	7296624	gi 7296624 gb AAF51905.1  (AE003600) CG10303 gene product [ <i>Drosophila melanogaster</i> ]	4.2
5429	6453299	gi 6453299 emb CAA04499.2  (AJ001045) P-type cation-transporting ATPase [ <i>Blastocladiella emersonii</i> ]	6.2
5430	14784393	gi 14784393 ref XP_033306.1  sodium channel, nonvoltage-gated 1 alpha [ <i>Homo sapiens</i> ]	7.6
5438	7657956	gi 7657956 dbj BAA94876.1  (AB028668) ORF1 [TT virus]	3.4
5449	7206840	gi 7206840 gb AAF39999.1  (AC006832) similar to a family of <i>C. elegans</i> proteins; see (GB:AF016684) [ <i>Caenorhabditis elegans</i> ]	6.3
5451	13636619	gi 13636619 ref XP_002437.3  cAMP-regulated guanine nucleotide exchange factor II [ <i>Homo sapiens</i> ]	0.000001
5454	7303178	gi 7303178 gb AAF58242.1  (AE003814) CG17390 gene product [ <i>Drosophila melanogaster</i> ]	3.1

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5457	7446747	gi 7446747 pir T07607 phosphate transport protein 2 - potato emb CAA67396.1  (X98891) inorganic phosphate transporter 2 [Solanum tuberosum]	4.2
5458	7471296	gi 7471296 pir A75450 conserved hypothetical protein - Deinococcus radiodurans (strain R1) gb AAF10584.1 AE001952_12 (AE001952) conserved hypothetical protein [Deinococcus radiodurans]	0.32
5460	11267150	gi 11267150 pir A81338 H <sup>+</sup> /K <sup>+</sup> -exchanging ATPase (EC 3.6.1.36) B chain Cj0677 [imported] - Campylobacter jejuni (strain NCTC 11168) emb CAB72951.1  (AL139076) potassium-transporting ATPase B chain [Campylobacter jejuni]	0.37
5467	1246530	gi 1246530 emb CAA64368.1  (X94742) olfactory receptor 2 [Gallus gallus]	0.00000001
5475	1353257	gi 1353257 gb AAB06234.1  (U26665) dimethyl sulphoxide reductase subunit B [Haemophilus influenzae]	4.2
5476	585053	gi 585053 sp P37202 DIS3_SCHPO MITOTIC CONTROL PROTEIN DIS3 pir A41944 mitotic control protein dis3+ - fission yeast (Schizosaccharomyces pombe) gb AAA35302.1  (M74094) mitotic control protein [Schizosaccharomyces pombe] emb CAA21102.1  (AL031743) mitotic control protein dis3 [Schizosaccharomyces pombe]	2.6
5477	7388318	gi 7388318 sp Q9ZL01 THIE_HELPJ PROBABLE THIAMINE-PHOSPHATE PYROPHOSPHORYLASE (TMP PYROPHOSPHORYLASE) (TMP-PPASE) (THIAMINE-PHOSPHATE SYNTHASE) pir G71889 thiamin-phosphate pyrophosphorylase (EC 2.5.1.3) - Helicobacter pylori (strain J99) gb AAD06361.1  (AE001508) THIAMINE PHOSPHATE PYROPHOSPHORYLASE [Helicobacter pylori J99]	7
5483	6754362	gi 6754362 ref NP_035962.1  insulin receptor-related receptor [Mus musculus] dbj BAA77835.1  (AB007135) insulin receptor-related receptor [Mus musculus]	7.5

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5486	10697032	gi 10697032 emb CAC12661.1  (AJ296086) cytochrome c oxidase subunit 1 [ <i>Anabaena variabilis</i> ]	0.96
5491	8919908	gi 8919908 emb CAB96228.1  (AJ133067) env polypeptide [Human immunodeficiency virus type 1]	7.4
5496	7658073	gi 7658073 dbj BAA94924.1  (AB028715) ORF1 [TT virus]	3.8
5500	9437326	gi 9437326 gb AAF87312.1 AF124441_1 (AF124441) NBC-like protein [ <i>Rattus norvegicus</i> ]	6.5
5501	6707844	gi 6707844 gb AAF25692.1  (AF113517) ventral anterior homeobox 3 [ <i>Xenopus laevis</i> ]	3.1
5502	12698075	gi 12698075 dbj BAB21856.1  (AB051552) KIAA1765 protein [ <i>Homo sapiens</i> ]	1.9
5503	7673065	gi 7673065 gb AAF66723.1 AF146723_1 (AF146723) cytochrome b [ <i>Tapinoma</i> sp. ACBJ.1]	4.2
5508	6754932	gi 6754932 ref NP_035121.1  olfactory receptor 49 [ <i>Mus musculus</i> ] gb AAD13315.1  (AF102523) olfactory receptor C6 [ <i>Mus musculus</i> ]	8E-12
5512	7296803	gi 7296803 gb AAF52080.1  (AE003604) CG2008 gene product [ <i>Drosophila melanogaster</i> ]	3.7
5514	5824783	gi 5824783 emb CAB54433.1  (AL110487) contains similarity to Pfam domain: PF01529 (DHHC zinc finger domain), Score=108.2, E-value=5e-29, N=1~cDNA EST yk282d12.5 comes from this gene [ <i>Caenorhabditis elegans</i> ]	4.9
5516	14750790	gi 14750790 ref XP_034677.1  general transcription factor II, i, isoform 5 [ <i>Homo sapiens</i> ] ref XP_011605.4  general transcription factor II, i, isoform 5 [ <i>Homo sapiens</i> ] ref XP_034678.1  similar to general transcription factor II, i (H. sapiens) [ <i>Homo sapiens</i> ] ref XP_034682.1  similar to general transcription factor II, i (H. sapiens) [ <i>Homo sapiens</i> ]	4.2
5519	3327362	gi 3327362 dbj BAA31704.1  (AB015754) cytochrome c oxidase subunit I [ <i>Spirometra erinaceieuropaei</i> ]	5.2
5520	14149807	gi 14149807 ref NP_115517.1  hypothetical protein DKFZp434K1421 [ <i>Homo sapiens</i> ] emb CAB66740.1  (AL136806) hypothetical protein [ <i>Homo sapiens</i> ]	5E-53

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5521	10567777	gi 10567777 gb AAG18583.1 AF292395_1 (AF292395) KRP170 [ <i>Strongylocentrotus purpuratus</i> ]	8.2
5524	5931705	gi 5931705 emb CAB56603.1  (Y18890) pol protein [Human endogenous retrovirus K]	6.2
5528	11271464	gi 11271464 pir C82792 methionyl-tRNA synthetase XF0549 [imported] - <i>Xylella fastidiosa</i> (strain 9a5c) gb AAF83359.1 AE003902_4 (AE003902) methionyl-tRNA synthetase [ <i>Xylella fastidiosa</i> 9a5c]	6.5
5530	2193879	gi 2193879 emb CAA54180.1  (X76785) hypothetical protein [ <i>Homo sapiens</i> ]	8.7
5531	7292567	gi 7292567 gb AAF47967.1  (AE003484) CG2186 gene product [ <i>Drosophila melanogaster</i> ]	6.7
5532	729093	gi 729093 sp P39881 CUT1_CANFA CCAAT DISPLACEMENT PROTEIN (HOMEBOX PROTEIN CLOX) (CLOX-1) pir S33121 homeotic protein CDP - dog (fragment) emb CAA48782.1  (X69017) Clox [ <i>Canis sp.</i> ]	0.14
5534	13569850	gi 13569850 ref NP_076357.1  RIKEN cDNA 9330127I20 [ <i>Mus musculus</i> ] gb AAG34081.1  (AF295105) cardiac Ca <sup>2+</sup> release channel [ <i>Mus musculus</i> ]	0.00000006
5535	14250321	gi 14250321 gb AAH08590.1 AAH08590 (BC008590) hypothetical protein FLJ21313 [ <i>Homo sapiens</i> ]	1E-60
5536	2143962	gi 2143962 pir I59422 rsec8 - rat (fragment) gb AAC52265.1  (U32498) rsec8 [ <i>Rattus norvegicus</i> ]	3E-99
5539	13475196	gi 13475196 ref NP_106760.1  transposase [ <i>Mesorhizobium loti</i> ] dbj BAB52546.1  (AP003008) transposase [ <i>Mesorhizobium loti</i> ]	5.6
5544	13376066	gi 13376066 ref NP_079019.1  hypothetical protein FLJ21934 [ <i>Homo sapiens</i> ] ref XP_017673.2  hypothetical protein FLJ21934 [ <i>Homo sapiens</i> ] dbj BAB15179.1  (AK025587) unnamed protein product [ <i>Homo sapiens</i> ]	1E-40
5545	13365831	gi 13365831 dbj BAB39301.1  (AB056753) hypothetical protein [ <i>Macaca fascicularis</i> ]	4.7
5547	2865238	gi 2865238 gb AAC38862.1  (U89706) DNA polymerase alpha [ <i>Urostyla grandis</i> ]	5.5
5548	14752983	gi 14752983 ref XP_004626.3  hypothetical protein FLJ10377 [ <i>Homo sapiens</i> ]	2.5

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5550	13489060	gi 13489060 ref NP_109590.1  retinoic acid induced 1; hypothetical protein DKFZp434A139 [Homo sapiens] emb CAC20423.1  (AJ271790) retinoid-acid induced protein 1 [Homo sapiens]	1E-21
5556	7512077	gi 7512077 pir T30878 dynein heavy chain isotype 4 - sea urchin ( <i>Tripneustes gratilla</i> ) (fragment) gb AAA63587.1  (U03973) dynein heavy chain isotype 4 [Tripneustes gratilla]	4E-27
5564	9971630	gi 9971630 dbj BAB12582.1  (AB046525) polymerase protein [Hepatitis B virus]	9.1
5565	1072920	gi 1072920 pir S49369 mobilization protein - <i>Campylobacter coli</i> plasmid pCCT1 and PCCT2 emb CAA57597.1  (X82080) Mob [Campylobacter coli] emb CAA57594.1  (X82079) mobilization protein [Campylobacter coli]	4.7
5568	12644030	gi 12644030 sp Q28295 VWF_CANFA VON WILLEBRAND FACTOR PRECURSOR (VWF)	8.8
5572	9964333	gi 9964333 ref NP_064801.1  AMV019 [Amsacta moorei entomopoxvirus] gb AAG02725.1 AF250284_19 (AF250284) AMV019 [Amsacta moorei entomopoxvirus]	8.3
5579	10436768	gi 10436768 dbj BAB14906.1  (AK024391) unnamed protein product [Homo sapiens]	1.2
5580	13786443	gi 13786443 gb AAK39568.1 AC025296_3 (AC025296) hypothetical protein [Oryza sativa]	0.75
5581	13376632	gi 13376632 ref NP_079355.1  hypothetical protein FLJ23231 [Homo sapiens] dbj BAB15581.1  (AK026884) unnamed protein product [Homo sapiens] gb AAH05001.1 AAH05001 (BC005001) hypothetical protein FLJ23231 [Homo sapiens]	0.58
5584	12641960	gi 12641960 gb AAK00073.1 AF200382_1 (AF200382) cytochrome oxidase subunit I (COI) [ <i>Ceratosolen nanus</i> ]	4.9
5585	1708893	gi 1708893 sp P51782 LYC_TRIVU LYSOZYME C PRECURSOR (1,4-BETA-N-ACETYLMURAMIDASE C) gb AAB97109.1  (U40664) lysozyme [Trichosurus vulpecula]	2.3
5586	10047155	gi 10047155 dbj BAB13371.1  (AB046765) KIAA1545 protein [Homo sapiens]	1.7

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5587	7446806	gi 7446806 pir F69791 conserved hypothetical protein yebB - <i>Bacillus subtilis</i> gb AAB62312.1  (U51115) unknown protein [ <i>Bacillus subtilis</i> ] emb CAB12456.1  (Z99107) similar to hypothetical proteins [ <i>Bacillus subtilis</i> ]	9.3
5591	400222	gi 400222 sp P22533 MANB_CALSA BETA-MANNANASE/ENDOGLUCANASE A PRECURSOR [INCLUDES: MANNAN ENDO-1,4-BETA-MANNOSIDASE A (BETA-MANNANASE) (ENDO-1,4-MANNANASE); ENDO-1,4-BETA-GLUCANASE (CELLULASE)] pir A48954 mannan endo-1,4-beta-mannosidase (EC 3.2.1.78) - <i>Caldocellum saccharolyticum</i> gb AAA71887.1  (L01257) beta-mannanase [ <i>Caldicellulosiruptor saccharolyticus</i> ]	8.6
5593	14029388	gi 14029388 gb AAK52669.1 AF319948_1 (AF319948) MMS19 [ <i>Drosophila melanogaster</i> ]	7.7
5595	1196482	gi 1196482 gb AAA88209.1  (M20307) unknown protein [Plasmid P1]	5.2
5599	14762995	gi 14762995 ref XP_044123.1  cadherin 20, type 2 [ <i>Homo sapiens</i> ]	4E-17
5600	13383732	gi 13383732 gb AAK21107.1 AF327877_3 (AF327877) envelope polypeptide [ <i>Equine infectious anemia virus</i> ]	3.7
5611	7521539	gi 7521539 pir A70410 processing proteinase (EC 3.4.-.-) - <i>Aquifex aeolicus</i> gb AAC07272.1  (AE000732) processing protease [ <i>Aquifex aeolicus</i> ]	9.5
5612	14721452	gi 14721452 ref XP_049513.1  48294 [ <i>Homo sapiens</i> ]	1
5615	13512594	gi 13512594 gb AAK28688.1  (AF078553) unknown function U3 [ <i>Ehrlichia canis</i> ]	9.1
5618	7490184	gi 7490184 pir T37997 carboxypeptidase y - fission yeast ( <i>Schizosaccharomyces pombe</i> ) pir T43236 carboxypeptidase C (EC 3.4.16.5) precursor [validated] fission yeast ( <i>Schizosaccharomyces pombe</i> ) emb CAB10121.1  (Z97209) carboxypeptidase y [ <i>Schizosaccharomyces pombe</i> ] dbj BAA25568.1  (D86560) carboxypeptidase Y [ <i>Schizosaccharomyces pombe</i> ]	0.01
5619	11119139	gi 11119139 gb AAG30518.1  (AF308549) immunoglobulin heavy chain [ <i>Homo sapiens</i> ]	1.1

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5622	7507209	gi 7507209 pir T29623 hypothetical protein T05E8.3 - <i>Caenorhabditis elegans</i> gb AAB52427.1  (U97014) strong similarity to the 'DEAH' subfamily of the 'DEAD' box family of helicases [ <i>Caenorhabditis elegans</i> ]	0.7
5623	7484413	gi 7484413 pir T08026 hypothetical protein B - <i>Chlamydomonas reinhardtii</i> chloroplast gb AAB05800.1  (U62943) unknown [ <i>Chlamydomonas reinhardtii</i> ]	9.3
5624	14766128	gi 14766128 ref XP_038109.1  KIAA1683 protein [Homo sapiens] emb CAB66801.1  (AL136867) hypothetical protein [Homo sapiens]	0.15
5629	6491915	gi 6491915 gb AAF14073.1 AF104231_1 (AF104231) paired-homeodomain transcription factor PAX4 [ <i>Mus musculus</i> ]	2.8
5630	14149940	gi 14149940 ref NP_115610.1  hypothetical protein FLJ23059 [Homo sapiens] dbj BAB15536.1  (AK026712) unnamed protein product [Homo sapiens]	1E-10
5636	7500466	gi 7500466 pir T21747 hypothetical protein F35C12.2 - <i>Caenorhabditis elegans</i>	3.7
5638	7490377	gi 7490377 pir T41496 conserved hypothetical protein SPCC622.16c - fission yeast ( <i>Schizosaccharomyces pombe</i> ) emb CAA21872.1  (AL033127) conserved hypothetical protein [ <i>Schizosaccharomyces pombe</i> ]	6.3
5642	6322907	gi 6322907 ref NP_012980.1  heavy chain of cytoplasmic dynein; Dyn1p [ <i>Saccharomyces cerevisiae</i> ] sp P36022 DYHC_YEAST DYNEIN HEAVY CHAIN, CYTOSOLIC (DYHC) pir S38128 dynein heavy chain, cytosolic - yeast ( <i>Saccharomyces cerevisiae</i> ) emb CAA82132.1  (Z28279) ORF YKR054c [ <i>Saccharomyces cerevisiae</i> ]	4
5646	7594617	gi 7594617 emb CAB88111.1  (AL078581) dJ12G14.1 (novel cyclophilin type peptidyl-prolyl cis-trans isomerase) [Homo sapiens]	8E-73
5647	14916439	gi 14916439 ref NP_149094.1  rhophilin-like protein [Homo sapiens] gb AAK58588.1 AF268032_1 (AF268032) rhophilin-like protein [Homo sapiens]	2E-14



Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5648	7227910	gi 7227910 sp O77408 OAR1_LYMST OCTOPAMINE RECEPTOR 1 (OA1) gb AAC61296.1  (U62771) octopamine receptor type 1 [ <i>Lymnaea stagnalis</i> ]	5.5
5649	13161815	gi 13161815 emb CAC32956.1  (AJ293063) cytochrome oxidase I [ <i>Aleochara punctatella</i> ]	7.9
5651	13631750	gi 13631750 ref XP_010294.3  arylsulfatase E precursor [ <i>Homo sapiens</i> ]	2E-12
5653	9181886	gi 9181886 gb AAF85678.1 AF266288_4 (AF266288) C protein [Measles virus]	3.3
5654	14755042	gi 14755042 ref XP_045122.1  KIAA1451 protein [ <i>Homo sapiens</i> ]	0.000000005
5655	9408429	gi 9408429 gb AAF87294.1  (AF228467) unknown [ <i>Letharia vulpina</i> ]	2.4
5656	14530763	gi 14530763 emb CAC42469.1  (AL137139) bA134O15.1 (similar to citrate lyase) [ <i>Homo sapiens</i> ]	2E-11
5661	2496882	gi 2496882 sp Q11187 YPD8_CAEEL HYPOTHETICAL 99.0 KD PROTEIN C05D11.8 IN CHROMOSOME III gb AAB53828.1  (U00048) C05D11.8 gene product [ <i>Caenorhabditis elegans</i> ]	4.9
5663	1276867	gi 1276867 gb AAA97866.1  (U40233) alkane hydroxylase [ <i>Stenotrophomonas maltophilia</i> ]	8.2
5664	4867907	gi 4867907 dbj BAA77721.1  (AB008177) hepatic nuclear factor 1-beta short form [ <i>Mus musculus</i> ]	3.8
5667	7292501	gi 7292501 gb AAF47904.1  (AE003481) CG11345 gene product [ <i>Drosophila melanogaster</i> ]	3.9
5673	1346543	gi 1346543 sp P49285 ML1A_CHICK MELATONIN RECEPTOR TYPE 1A (MEL-1A-R) (CKA) gb AAA92498.1  (U31820) Mel-1a melatonin receptor [ <i>Gallus gallus</i> ]	7
5675	14731714	gi 14731714 ref XP_028009.1  KIAA1563 protein [ <i>Homo sapiens</i> ]	4E-26
5676	9628467	gi 9628467 ref NP_043350.1  putative [Human papillomavirus type 21] gb AAA79398.1  (U31779) putative [Human papillomavirus type 21]	1.2
5680	13241978	gi 13241978 gb AAK16497.1 AF329199_1 (AF329199) CocoaCrisp [ <i>Gallus gallus</i> ]	1.9
5681	11466217	gi 11466217 ref NP_066540.1  SecY-independent transporter protein [ <i>Naegleria gruberi</i> ] gb AAG17818.1 AF288092_43 (AF288092) SecY-independent transporter protein [ <i>Naegleria gruberi</i> ]	4.2

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5682	10581459	gi 10581459 gb AAG20194.1  (AE005096) enoyl-CoA hydratase; Fad1 [Halobacterium sp. NRC-1]	5
5684	4903124	gi 4903124 dbj BAA78009.1  (AB027308) nucleotide-binding protein [Plasmid R64]	3.1
5685	13242251	gi 13242251 ref NP_077336.1  hairy and enhancer of split 1, (Drosophila) [Rattus norvegicus] sp Q04666 HES1_RAT TRANSCRIPTION FACTOR HES-1 (HAIRY AND ENHANCER OF SPLIT 1) (HAIRY-LIKE) (RHL) pir S36748 transcription factor HES-1 - rat dbj BAA02682.1  (D13417) HES-1 factor [Rattus norvegicus] prf 1905315A HES-1 protein [Rattus norvegicus]	9.4
5689	9957880	gi 9957880 gb AAG03352.1  (AY005440) 51-kDa antigen [Ehrlichia risticii]	6.9
5691	7509017	gi 7509017 pir T33819 hypothetical protein W05F2.7 - Caenorhabditis elegans gb AAC78217.1  (AF106582) Hypothetical protein W05F2.7 [Caenorhabditis elegans]	0.82
5692	1082343	gi 1082343 pir S50832 atrophin-1 - human	0.05
5696	11595629	gi 11595629 emb CAC18249.1  (AL451018) conserved hypothetical protein [Neurospora crassa]	3.6
5698	11465898	gi 11465898 ref NP_066447.1  ATP synthase F0 subunit 6 [Ochromonas danica] gb AAG18413.1 AF287134_38 (AF287134) ATP synthase F0 subunit 6 [Ochromonas danica]	6.6
5699	13384736	gi 13384736 ref NP_084514.1  dynein, cytoplasmic, heavy chain 1; dynein heavy chain, retrograde transport [Mus musculus] sp Q9JHU4 DYHC_MOUSE DYNEIN HEAVY CHAIN, CYTOSOLIC (DYHC) (CYTOPLASMIC DYNEIN HEAVY CHAIN) gb AAF91078.1  (AY004877) cytoplasmic dynein heavy chain [Mus musculus]	3E-12
5701	11431299	gi 11431299 ref XP_007961.1  phosphorylase kinase, beta [Homo sapiens]	8.8
5704	7486830	gi 7486830 pir T04917 hypothetical protein T10I14.190 - Arabidopsis thaliana emb CAA16786.1  (AL021712) putative protein [Arabidopsis thaliana] emb CAB79191.1  (AL161557) putative protein [Arabidopsis thaliana]	0.4

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5707	7470729	gi 7470729 pir  S75327 lysostaphin - <i>Synechocystis</i> sp. (strain PCC 6803) dbj BAA17241.1  (D90904) lysostaphin [ <i>Synechocystis</i> sp. PCC 6803]	8.8
5708	7330072	gi 7330072 gb AAF60061.1 AF210726_82 (AF210726) ORFRU4-R [ <i>Macaca mulatta</i> rhadinovirus 26-95]	0.24
5711	14774911	gi 14774911 ref XP_027365.1  ADP-ribosylation factor-like 6 interacting protein [ <i>Homo sapiens</i> ]	1E-11
5712	14721018	gi 14721018 ref XP_051562.1  similar to agrin ( <i>H. sapiens</i> ) [ <i>Homo sapiens</i> ]	0.14
5716	6324014	gi 6324014 ref NP_014084.1  FIFO ATPase assembly protein; Atp11p [ <i>Saccharomyces cerevisiae</i> ] sp P32453 ATPS_YEAST ATP11 PROTEIN PRECURSOR pir  S51297 ATP11 protein - yeast ( <i>Saccharomyces cerevisiae</i> ) gb AAA34447.1  (M87006) ATP11 protein [ <i>Saccharomyces cerevisiae</i> ] emb CAA86381.1  (Z46259) ATP11 [ <i>Saccharomyces cerevisiae</i> ] emb CAA96245.1  (Z71591) ORF YNL315c [ <i>Saccharomyces cerevisiae</i> ]	4.1
5718	12861848	gi 12861848 dbj BAB32292.1  (AK021073) putative [ <i>Mus musculus</i> ]	0.07
5719	14744130	gi 14744130 ref XP_045895.1  57406 [ <i>Homo sapiens</i> ]	1.4
5722	11612206	gi 11612206 gb AAG37299.1  (AY009937) unknown [ <i>Sinorhizobium fredii</i> ]	7.4
5723	4494967	gi 4494967 gb AAD21389.1  (AF083501) R11 [ <i>Macaca mulatta</i> rhadinovirus 17577] gb AAF60041.1 AF210726_62 (AF210726) vIRF [ <i>Macaca mulatta</i> rhadinovirus 26-95]	3.3
5727	12644379	gi 12644379 sp Q02099 RAD3_SCHPO DNA REPAIR PROTEIN RAD3 pir  T39911 rad3 checkpoint protein - fission yeast ( <i>Schizosaccharomyces pombe</i> ) emb CAB40165.1  (AL049558) rad3 checkpoint protein [ <i>Schizosaccharomyces pombe</i> ]	9.3
5732	7492633	gi 7492633 pir  T40241 probable guanine nucleotide exchange factor - fission yeast ( <i>Schizosaccharomyces pombe</i> ) emb CAB58155.1  (AL121815) putative guanine nucleotide exchange factor [ <i>Schizosaccharomyces pombe</i> ]	8.2
5737	10047255	gi 10047255 dbj BAB13416.1  (AB046810) KIAA1590 protein [ <i>Homo sapiens</i> ]	0.00000002

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5742	2498204	gi 2498204 sp Q05682 CALD_HUMAN CALDESMON (CDM) pir  JH0628 caldesmon - human gb AAA58419.1  (M83216) caldesmon [Homo sapiens]	8E-23
5744	11037059	gi 11037059 ref NP_036540.1  protein kinase C binding protein 1 [Homo sapiens] gb AAF71262.1  (AF233453) RACK-like protein PRKCBP1 [Homo sapiens]	0.00000001
5746	14575679	gi 14575679 gb AAK68690.1 AF156100_1 (AF156100) hemicentin [Homo sapiens]	1.9
5748	11466210	gi 11466210 ref NP_066533.1  NADH dehydrogenase subunit 2 [Naegleria gruberi] gb AAG17811.1 AF288092_36 (AF288092) NADH dehydrogenase subunit 2 [Naegleria gruberi]	8.2
5750	8096340	gi 8096340 dbj BAA95898.1  (AB036737) RERE [Homo sapiens]	0.5
5751	14275752	gi 14275752 emb CAC40032.1  (AJ310844) P-type ATPase [Hordeum vulgare]	0.53
5752	5834582	gi 5834582 emb CAB55313.1  (AJ132948) rfg7 protein [Homo sapiens]	1.7
5754	13877921	gi 13877921 gb AAK44038.1 AF370223_1 (AF370223) unknown protein [Arabidopsis thaliana]	4
5755	5869818	gi 5869818 emb CAB55575.1  (AJ249395) NADH-ubiquinone oxidoreductase subunit 6 [Globodera pallida]	4.2
5756	7023033	gi 7023033 dbj BAA91809.1  (AK001649) unnamed protein product [Homo sapiens]	e-102
5757	14729667	gi 14729667 ref XP_029101.1  KIAA0947 protein [Homo sapiens]	0.22
5758	14726213	gi 14726213 ref XP_010556.3  PR domain containing 16 [Homo sapiens]	0.87

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5761	4757900	gi 4757900 ref NP_004334.1  calreticulin precursor; Sicca syndrome antigen A (autoantigen Ro; calreticulin); autoantigen Ro [Homo sapiens] ref XP_032020.1  calreticulin precursor [Homo sapiens] ref XP_032023.1  calreticulin precursor [Homo sapiens] ref XP_032022.1  calreticulin precursor [Homo sapiens] ref XP_009055.3  calreticulin precursor [Homo sapiens] ref XP_032021.1  calreticulin precursor [Homo sapiens] sp P27797 CRTC_HUMAN CALRETICULIN PRECURSOR (CRP55) (CALREGULIN) (HACBP) (ERP60) (52 KDA RIBONUCLEOPROTEIN AUTOANTIGEN RO/SS-A) pir A37047 calreticulin precursor - human gb AAA51916.1  (M84739) calreticulin [Homo sapiens] gb AAA36582.1  (M32294) Ro ribonucleoprotein autoantigen (Ro/SS-A) precursor [Homo sapiens] gb AAB51176.1  (AD000092) calreticulin [Homo sapiens] gb AAH02500.1 AAH02500 (BC002500) calreticulin [Homo sapiens] gb AAH07911.1 AAH07911 (BC007911) calreticulin [Homo sapiens]	5E-16
5762	14714688	gi 14714688 gb AAH10485.1 AAH10485 (BC010485) Unknown (protein for MGC:7224) [Mus musculus]	1.1
5765	14751380	gi 14751380 ref XP_041291.1  cAMP response element-binding protein CRE-BPa [Homo sapiens]	5E-14
5767	2105193	gi 2105193 gb AAB57925.1  (U86889) hypothetical protein [Molluscum contagiosum virus subtype 1]	7.8
5771	13278418	gi 13278418 gb AAH04019.1 AAH04019 (BC004019) Similar to mesoderm specific transcript [Mus musculus]	0.94
5772	14720481	gi 14720481 ref XP_048811.1  hypothetical protein FLJ22116 [Homo sapiens] ref XP_048810.1  hypothetical protein FLJ22116 [Homo sapiens]	2E-23

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5773	6321548	gi 6321548 ref NP_011625.1  Ygr110wp [Saccharomyces cerevisiae] sp P53264 YG2V_YEAST HYPOTHETICAL 52.0 KD PROTEIN IN CLB6- SHY1 INTERGENIC REGION pir S64418 hypothetical protein YGR110w - yeast (Saccharomyces cerevisiae) emb CAA97118.1  (Z72895) ORF YGR110w [Saccharomyces cerevisiae]	2.4
5776	12853842	gi 12853842 dbj BAB29864.1  (AK015480) putative [Mus musculus]	5.6
5778	13384736	gi 13384736 ref NP_084514.1  dynein, cytoplasmic, heavy chain 1; dynein heavy chain, retrograde transport [Mus musculus] sp Q9JHU4 DYHC_MOUSE DYNEIN HEAVY CHAIN, CYTOSOLIC (DYHC) (CYTOPLASMIC DYNEIN HEAVY CHAIN) gb AAF91078.1  (AY004877) cytoplasmic dynein heavy chain [Mus musculus]	2E-92
5781	7498705	gi 7498705 pir T20640 hypothetical protein F09C3.3 - Caenorhabditis elegans	9.7
5782	11356402	gi 11356402 pir T44074 hypothetical protein [imported] - Staphylococcus aureus (fragment)	5.5
5783	10726396	gi 10726396 gb AAF54288.2  (AE003680) CG11773 gene product [Drosophila melanogaster]	4.1
5784	11935116	gi 11935116 gb AAG41977.1 AF311942_1 (AF311942) ethylene receptor [Carica papaya]	7.5
5787	4456467	gi 4456467 emb CAB37294.1  (AJ011001) TM7XN1 protein [Homo sapiens]	3.8
5788	13676779	gi 13676779 gb AAK38272.1 AF330197_1 (AF330197) Arkadia [Mus musculus]	2.2
5789	13676779	gi 13676779 gb AAK38272.1 AF330197_1 (AF330197) Arkadia [Mus musculus]	2.3
5795	11024704	gi 11024704 ref NP_061956.1  hypothetical protein FLJ11219 [Homo sapiens] dbj BAA92074.1  (AK002081) unnamed protein product [Homo sapiens]	8E-23
5797	13606086	gi 13606086 gb AAK32948.1  (U41014) Hypothetical protein C06G1.1 [Caenorhabditis elegans]	8.3
5798	10728595	gi 10728595 gb AAF52302.2  (AE003611) CG9011 gene product [Drosophila melanogaster]	8E-21
5799	12847975	gi 12847975 dbj BAB27780.1  (AK011690) putative [Mus musculus]	3E-44

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5801	7243247	gi 7243247 dbj BAA92671.1  (AB037854) KIAA1433 protein [Homo sapiens]	3E-84
5803	10728595	gi 10728595 gb AAF52302.2  (AE003611) CG9011 gene product [Drosophila melanogaster]	8E-21
5804	1354082	gi 1354082 gb AAB37237.1  (U47033) polypeptide [bean yellow mosaic virus]	6.8
5808	11354734	gi 11354734 pir C82043 conserved hypothetical protein VC2703 [imported] - Vibrio cholerae (group O1 strain N16961) gb AAF95843.1  (AE004336) conserved hypothetical protein [Vibrio cholerae]	4.9
5809	13272353	gi 13272353 gb AAK17116.1 AF291051_13 (AF291051) transketolase [Candidatus Carsonella ruddii]	8.9
5810	10728595	gi 10728595 gb AAF52302.2  (AE003611) CG9011 gene product [Drosophila melanogaster]	9E-21
5818	7340927	gi 7340927 dbj BAA92999.1  (AP001550) Similar to Schizosaccharomyces pombe chromosome I cosmid c1D4; hypothetical protein &SPAC1D4_10 (Q10155) [Oryza sativa]	5.6
5821	4115911	gi 4115911 gb AAD03423.1  (U78517) cAMP-regulated guanine nucleotide exchange factor II [Rattus norvegicus]	3E-11
5822	7498336	gi 7498336 pir T15086 hypothetical protein E03D2.4 - Caenorhabditis elegans gb AAB94164.1  (AF039036) Hypothetical protein E03D2.4 [Caenorhabditis elegans]	7.1
5825	7492270	gi 7492270 pir T40528 palmitoyl-protein thioesterase precursor - fission yeast (Schizosaccharomyces pombe) emb CAA19178.1  (AL023634) palmitoyl-protein thioesterase precursor [Schizosaccharomyces pombe]	1.2
5827	7497138	gi 7497138 pir T30158 hypothetical protein C37A2.6 - Caenorhabditis elegans gb AAB52451.1  (U97194) Hypothetical protein C37A2.6 [Caenorhabditis elegans]	5.4
5830	7469981	gi 7469981 pir S74598 hypothetical protein sll1040 - Synechocystis sp. (strain PCC 6803) dbj BAA16750.1  (D90900) ORF_ID:sll1040-unknown protein [Synechocystis sp. PCC 6803]	9.4

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5831	10177727	gi 10177727 dbj BAB10973.1  (AB015471) gene_id:K9B18.6~unknown protein [Arabidopsis thaliana]	2.6
5834	2231323	gi 2231323 gb AAB61999.1  (U77045) bactinecin 6 [Ovis aries]	6.9
5838	7495511	gi 7495511 pir T18990 hypothetical protein C06B8.4 - Caenorhabditis elegans emb CAB03847.1  (Z81463) predicted using Genefinder~Similarity to C.elegans olfactory receptor ODR-10 (TR:Q17376), contains similarity to Pfam domain: PF01461 (7TM chemoreceptor), Score=-92.4, E-value=4.9e-10, N=1 [Caenorhabditis elegans]	0.84
5839	14722156	gi 14722156 ref XP_001418.4  centromere protein F (350/400kD) [Homo sapiens]	2
5841	14590902	gi 14590902 ref NP_142975.1  hypothetical protein [Pyrococcus horikoshii] pir E71100 hypothetical protein PH1064 - Pyrococcus horikoshii dbj BAA30163.1  (AP000004) 718aa long hypothetical protein [Pyrococcus horikoshii]	3.5
5844	10173304	gi 10173304 dbj BAB04409.1  (AP001509) transposase (04) [Bacillus halodurans]	2.2
5845	7510388	gi 7510388 pir T27298 hypothetical protein Y68A4A.7 - Caenorhabditis elegans emb CAA16418.1  (AL021503) predicted using Genefinder~contains similarity to Pfam domain: PF01604 (7TM chemoreceptor), Score=-48.3, E-value=7.1e-07, N=1 [Caenorhabditis elegans]	2.9
5851	13812127	gi 13812127 ref NP_113254.1  hypothetical protein [Guillardia theta] gb AAK39814.1 AF165818_22 (AF165818) hypothetical protein [Guillardia theta]	0.92
5852	6016842	gi 6016842 dbj BAA85182.1  (AB033168) nuclear protein ZAP [Mus musculus]	3.3
5854	8922744	gi 8922744 ref NP_060730.1  hypothetical protein FLJ10891 [Homo sapiens] dbj BAA91884.1  (AK001753) unnamed protein product [Homo sapiens]	8E-69



Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5856	118965	gi 118965 sp P23098 DYHC_TRIGR DYNEIN BETA CHAIN, CILIARY pir S17653 dynein beta heavy chain, ciliary - sea urchin (Tripneustes gratilla) emb CAA42170.1  (X59603) Beta heavy chain of outer-arm axonemal dynein ATPase [Tripneustes gratilla] prf 1714372A dynein:SUBUNIT=beta heavy chain [Tripneustes gratilla]	0.0000001
5858	10640323	gi 10640323 emb CAC12137.1  (AL445066) conserved hypothetical membrane protein [Thermoplasma acidophilum]	1.3
5859	9964574	gi 9964574 ref NP_065042.1  AMV260 [Amsacta moorei entomopoxvirus] gb AAG02966.1 AF250284_260 (AF250284) AMV260 [Amsacta moorei entomopoxvirus]	4
5861	5360226	gi 5360226 dbj BAA36472.1  (AB015177) F0-ATPase subunit 6 [Beta vulgaris]	3
5868	7327641	gi 7327641 gb AAF45040.2  (AF146609) putative modification methyltransferase [Aeromonas hydrophila]	2.8
5871	5031969	gi 5031969 ref NP_005758.1  purinergic receptor (family A group 5) [Homo sapiens] sp P43657 P2Y5_HUMAN P2Y PURINOCEPTOR 5 (P2Y5) (PURINERGIC RECEPTOR 5) (RB INTRON ENCODED G-PROTEIN COUPLED RECEPTOR) pir T09508 intron 17 purinergic receptor P2Y5 - human gb AAB62190.1  (AF000546) purinergic receptor P2Y5 [Homo sapiens]	3.2
5872	92972	gi 92972 pir S04757 NADH dehydrogenase (ubiquinone) (EC 1.6.5.3) chain 5 - rat mitochondrion	9.8
5876	13540669	gi 13540669 ref NP_110480.1  linker for activation of T cells [Rattus norvegicus] sp O70601 LAT_RAT LINKER FOR ACTIVATION OF T CELLS (36 KDA PHOSPHO-TYROSINE ADAPTOR PROTEIN) (PP36) (P36-38) emb CAA04577.1  (AJ001184) 36 kDa phospho-tyrosine [Rattus norvegicus]	0.4

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5877	7510482	gi 7510482 pir T27406 hypothetical protein Y75B8A.24 - <i>Caenorhabditis elegans</i> emb CAA22108.1  (AL033514) contains similarity to Pfam domain: PF00454 (Phosphatidylinositol 3- and 4-kinases), Score=392.3, E-value=1.6e-114, N=2; PF00613 (Phosphoinositide 3-kinase family, accessory domain (PIK domain)), Score=76.1, E-value=2.4e-19, N=1~cDNA EST yk2>	0.32
5881	11284162	gi 11284162 pir H81077 hypothetical protein NMB1490 [imported] - <i>Neisseria meningitidis</i> (group B strain MD58) gb AAF41846.1  (AE002498) hypothetical protein [ <i>Neisseria meningitidis</i> MC58]	4.2
5882	4503801	gi 4503801 ref NP_003893.1  far upstream element-binding protein; far upstream element binding protein; FUSE-binding protein [ <i>Homo sapiens</i> ] pir A53184 myc far upstream element-binding protein - human gb AAA17976.1  (U05040) FUSE binding protein [ <i>Homo sapiens</i> ]	0.4
5883	9929953	gi 9929953 dbj BAB12133.1  (AB047609) hypothetical protein [ <i>Macaca fascicularis</i> ]	9.7
5884	13631383	gi 13631383 ref XP_010272.2  retinoblastoma-binding protein 7 [ <i>Homo sapiens</i> ] ref XP_045112.1  retinoblastoma-binding protein 7 [ <i>Homo sapiens</i> ]	7.3
5886	7662084	gi 7662084 ref NP_055474.1  KIAA0377 gene product [ <i>Homo sapiens</i> ] dbj BAA20831.1  (AB002375) KIAA0377 [ <i>Homo sapiens</i> ]	2E-44
5888	4507023	gi 4507023 ref NP_003031.1  solute carrier family 4, anion exchanger, member 2 (erythrocyte membrane protein band 3-like 1) [ <i>Homo sapiens</i> ] sp P04920 B3A2_HUMAN ANION EXCHANGE PROTEIN 2 (NON-ERYTHROID BAND 3-LIKE PROTEIN) (BND3L) pir S21086 anion exchange protein 2 - human emb CAA44067.1  (X62137) anion exchange protein 2 (AE2) [ <i>Homo sapiens</i> ]	9.1

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5892	6321764	gi 6321764 ref NP_011840.1  Yhl023cp [Saccharomyces cerevisiae] sp P38742 YHC3_YEAST HYPOTHETICAL 130.0 KD PROTEIN IN SNF6- SPO11 INTERGENIC REGION pir S46837 hypothetical protein YHL023c - yeast (Saccharomyces cerevisiae) gb AAB65076.1  (U11582) No definition line found [Saccharomyces cerevisiae]	7.4
5894	7507827	gi 7507827 pir T16876 hypothetical protein T14E8.3 - Caenorhabditis elegans gb AAA82386.1  (U41036) Hypothetical protein T14E8.3 [Caenorhabditis elegans]	2.4
5896	119714	gi 119714 sp P13983 EXTN_TOBAC EXTENSIN PRECURSOR (CELL WALL HYDROXYPROLINE- RICH GLYCOPROTEIN) pir S06733 hydroxyproline- rich glycoprotein precursor - common tobacco emb CAA32090.1  (X13885) extensin (AA 1-620) [Nicotiana tabacum]	2.4
5897	13540669	gi 13540669 ref NP_110480.1  linker for activation of T cells [Rattus norvegicus] sp O70601 LAT_RAT LINKER FOR ACTIVATION OF T CELLS (36 KDA PHOSPHO-TYROSINE ADAPTOR PROTEIN) (PP36) (P36-38) emb CAA04577.1  (AJ001184) 36 kDa phospho-tyrosine [Rattus norvegicus]	0.4
5898	14787176	gi 14787176 gb AAG54083.1  (AY017475) CSMD1 [Mus musculus]	0.5
5899	14192869	gi 14192869 gb AAK55774.1 AC079038_8 (AC079038) Putative polyprotein [Oryza sativa]	1.9
5900	11260604	gi 11260604 pir G82485 acetate kinase VCA0235 [imported] - Vibrio cholerae (group O1 strain N16961) gb AAF96146.1  (AE004363) acetate kinase [Vibrio cholerae]	5.4
5914	5688864	gi 5688864 dbj BAA82706.1  (AB030586) amino acid transporter-like protein 1 [Arabidopsis thaliana]	0.74
5915	14571551	gi 14571551 gb AAK64511.1  (AY036902) degenerative spermatocyte-like protein RDES [Rattus norvegicus]	7.1
5917	11496539	gi 11496539 ref NP_044549.1  ribosomal protein S3 [Toxoplasma gondii] gb AAD41136.1 U87145_5 (U87145) ribosomal protein S3 [Toxoplasma gondii]	2.4

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5919	12275264	gi 12275264 emb CAC22282.1  (AJ303456) WASP interacting protein [Rattus norvegicus]	0.29
5920	7158837	gi 7158837 gb AAF37557.1 AF214067_1 (AF214067) serine-repeat antigen protein [Plasmodium falciparum]	3.8
5922	7327641	gi 7327641 gb AAF45040.2  (AF146609) putative modification methyltransferase [Aeromonas hydrophila]	3.2
5934	4321845	gi 4321845 gb AAD15841.1  (AF064782) unknown [Mus musculus]	4E-59
5938	6562754	gi 6562754 emb CAB62893.1  (AL035475) hypothetical protein, MAL4P2.52 [Plasmodium falciparum]	0.69
5939	13814462	gi 13814462 gb AAK41504.1  (AE006741) ABC transporter, ATP binding protein [Sulfolobus solfataricus]	2.3
5941	5802786	gi 5802786 gb AAD51779.1  (AF124511) BVES [Gallus gallus]	1.7
5943	5596342	gi 5596342 dbj BAA82602.1  (AB026825) sALK-2 [Ephydatia fluviatilis]	7.2
5946	9802527	gi 9802527 gb AAF99729.1 AC004557_8 (AC004557) F17L21.9 [Arabidopsis thaliana]	6.8
5949	3820854	gi 3820854 emb CAA10852.1  (AJ222582) maturase-like protein [Euglena granulata]	4.2
5951	7476228	gi 7476228 pir A70905 hypothetical protein Rv0174 - Mycobacterium tuberculosis (strain H37RV) emb CAB09741.1  (Z97050) hypothetical protein Rv0174 [Mycobacterium tuberculosis]	0.46
5953	7159336	gi 7159336 gb AAF37725.1 AF238235_1 (AF238235) diaphanous protein [Entamoeba histolytica]	0.24
5954	7294100	gi 7294100 gb AAF49454.1  (AE003527) CG12243 gene product [Drosophila melanogaster]	4.6
5956	2689578	gi 2689578 gb AAB91357.1  (U96421) cytochrome b [Dennyus carljonesi fosteri]	9.4
5957	11071788	gi 11071788 emb CAC14632.1  (AL449144) hypothetical protein P214.26 [Leishmania major]	5.7

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5958	9631305	gi 9631305 ref NP_048116.1  ORF MSV045 hypothetical protein [Melanoplus sanguinipes entomopoxvirus] pir T28206 hypothetical protein ORF45 - Melanoplus sanguinipes entomopoxvirus gb AAC97618.1  (AF063866) ORF MSV045 hypothetical protein [Melanoplus sanguinipes entomopoxvirus]	3
5959	14750752	gi 14750752 ref XP_031441.1  phosphodiesterase 8A [Homo sapiens]	0.47
5962	4996347	gi 4996347 dbj BAA78416.1  (AB021177) complement B/C2-A2 [Cyprinus carpio]	1.7
5964	7510076	gi 7510076 pir T31613 hypothetical protein Y50E8A.i - Caenorhabditis elegans	7.1
5965	6958206	gi 6958206 gb AAF32493.1 AF093132_1 (AF093132) kexin-like protease KEX1 [Pneumocystis carinii f. sp. muris]	4.5
5966	13542701	gi 13542701 gb AAH05557.1 AAH05557 (BC005557) Unknown (protein for MGC:7062) [Mus musculus]	0.00003
5967	12852967	gi 12852967 dbj BAB29595.1  (AK014872) putative [Mus musculus]	3.2
5969	6449214	gi 6449214 gb AAF08856.1 AF194824_1 (AF194824) NADH dehydrogenase [Aptenia cordifolia]	0.84
5971	7492532	gi 7492532 pir T39653 probable DNA repair and recombination protein - fission yeast (Schizosaccharomyces pombe) emb CAA21300.1  (AL031856) putative DNA repair and recombination protein [Schizosaccharomyces pombe]	8.4
5972	1171089	gi 1171089 sp P10243 MYBA_HUMAN MYB-RELATED PROTEIN A (A-MYB) pir S03423 transforming protein A-myb - human	2E-28
5973	4589488	gi 4589488 dbj BAA76772.1  (AB023145) KIAA0928 protein [Homo sapiens]	9.8
5974	6686326	gi 6686326 sp P77589 MHPT_ECOLI PUTATIVE 3-HYDROXYPHENYLPROPIONIC ACID TRANSPORTER	1.8
5976	7298382	gi 7298382 gb AAF53607.1  (AE003655) CG15141 gene product [Drosophila melanogaster]	5.7

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
5979	7477896	gi 7477896 pir D70595 probable ATP-dependent RNA helicase - Mycobacterium tuberculosis (strain H37RV) emb CAB08305.1  (Z95120) rhIE [Mycobacterium tuberculosis] gb AAK47649.1  (AE007143) ATP-dependent RNA helicase DeaD [Mycobacterium tuberculosis CDC1551]	4.7
5980	10726674	gi 10726674 gb AAF55880.2  (AE003734) CG16791 gene product [Drosophila melanogaster]	5.5
5983	10303299	gi 10303299 emb CAC10094.1  (AL442164) related to SEN1 protein [Neurospora crassa]	9.4
5984	14625441	gi 14625441 dbj BAB61903.1  (AB053446) KIAA1773 protein [Homo sapiens]	2.4
5985	2496701	gi 2496701 sp P55552 Y4LL_RHISN HYPOTHETICAL 91.8 KD PROTEIN Y4LL gb AAB91764.1  (AE000083) Y4IL [Rhizobium sp. NGR234]	4
5988	13652830	gi 13652830 ref XP_017068.1  65851 [Homo sapiens] ref XP_039450.1  similar to NONHISTONE CHROMOSOMAL PROTEIN HMG-14 (H. sapiens) [Homo sapiens]	0.00001
5989	2098719	gi 2098719 gb AAB57675.1  (U85709) putative fimbrial-associated protein [Actinomyces naeslundii]	5.4
5990	1142588	gi 1142588 gb AAA84740.1  (U05313) CR3 [Trypanosoma brucei]	0.02
5991	11283273	gi 11283273 pir A81658 hypothetical protein TC0845 [imported] - Chlamydia muridarum (strain Nigg) gb AAF39643.1  (AE002351) hypothetical protein [Chlamydia muridarum]	7.2
5992	13507856	gi 13507856 ref NP_109805.1  ribosomal protein L20 [Mycoplasma pneumoniae] sp P78023 RL20_MYCPN 50S RIBOSOMAL PROTEIN L20 pir S73363 ribosomal protein L20 - Mycoplasma pneumoniae (strain ATCC 29342) gb AAG34734.1 AE000004_3 (AE000004) ribosomal protein L20 [Mycoplasma pneumoniae]	0.84
5997	7506563	gi 7506563 pir T24113 hypothetical protein R10D12.3 - Caenorhabditis elegans emb CAB03243.1  (Z81109) predicted using Genefinder~similar to G-protein coupled receptor [Caenorhabditis elegans]	6.3
5998	7510771	gi 7510771 pir T29919 hypothetical protein ZC449.5 - Caenorhabditis elegans	3.6

Table 3B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)			
SEQ ID NO	ACCESS N	DESCRIPTION	P VALUE
6001	14755125	gi 14755125 ref XP_006601.4  hypothetical protein FLJ10659 [Homo sapiens]	3E-96
6005	7508360	gi 7508360 pir  T25220 hypothetical protein T24B8.4 - Caenorhabditis elegans emb CAA92756.1  (Z68338) predicted using Genefinder~contains similarity to Pfam domain: PF02205 (Wiskott Aldrich syndrome homology region 2), Score=43.6, E-value=1.5e-09, N=2~cDNA EST yk96d7.5 comes from this gene~cDNA EST yk96d7.3 comes from this gene~cDNA EST yk76d1>	1
6006	4960210	gi 4960210 gb AAD34644.1 AF154112_1 (AF154112) transcription co-repressor Sin3 [Xenopus laevis]	7

Table 4 SEQ ID NO	SEQ NAME	CLUSTER	PROFILE NAME	DIR	SCORE
6	2102.B18.gz43_275316	558147	Ets_Cterm	for	19.58
9	2103.M06.gz43_275519	377696	protkinase	for	20.71
38	2153.K14.gz43_278937	372952	Dead_box_helic	for	172.21
39	2154.M04.gz43_279163	377696	protkinase	for	20.71
61	2165.H06.gz43_280342	393635	zf-c2h2	for	33.96
69	2166.J11.gz43_281368	377696	protkinase	for	20.71
108	2118.A09.gz43_307025	446397	bzip	for	19.15
117	2131.I13.gz43_308085	34071	wd40	for	37.45
118	2131.B14.gz43_308094	221686	protkinase	for	33.14
228	1573.F18.gz43_208848	639849	PH	for	42.77
229	1573.K19.gz43_208869	486238	protkinase	rev	45.41
415	1585.G22.gz43_210545	412416	Dead_box_helic	for	49.67
445	1587.B06.gz43_211440	446984	ANK	rev	23.12
486	1597.G06.gz43_212233	639593	defensins	rev	18.27
487	1597.J06.gz43_212236	557975	ANK	for	35.63
502	1597.F18.gz43_212424	596882	zf-c2h2	rev	18.13
700	1694.M19.gz43_214375	425923	zf-c2h2	for	32.76
847	1706.P07.gz43_216138	639901	zf-c2h2	for	19.43
877	1707.J02.gz43_216453	550237	zf-ccch	for	26.74
1511	1755.P24.gz43_223395	606129	rvt	for	37.6
1714	1790.C14.gz43_226997	727150	bzip	for	24.2
2034	1828.J19.gz43_232472	728303	zf-c2h2	rev	18.19
2038	1828.P21.gz43_232510	509678	Retvir_asp_protease	for	28.5
2054	1838.N05.gz43_233020	481614	zf-c2h2	for	18.52
2514	1888.O06.gz43_240269	451764	rvt	for	49.99
2973	1924.H18.gz43_245579	499700	7tm_1	rev	73.7
3013	1935.E18.gz43_246500	490805	ANK	rev	28.74
3140	1981.O19.gz43_248062	558949	zf-c3hc4	rev	19.16
3403	1958.N12.gz43_250647	556308	zf-c2h2	for	40.77
3524	1923.M22.gz43_252963	562603	zf-c2h2	rev	42.42
3653	1995.C03.gz43_256117	562152	zf-c2h2	rev	18.97
3689	1995.P13.gz43_256290	562989	EGF	rev	19.4
3723	1995.B24.gz43_256452	556632	zf-c2h2	rev	20.64
3814	2007.F09.gz43_257778	560652	zf-c2hc	rev	21.49
3931	2008.F18.gz43_258308	550497	bzip	for	20.27
4151	1669.G11.gz43_260853	503275	protkinase	rev	43.25
4356	1682.O17.gz43_262495	450211	bzip	rev	26.06
4373	1682.F21.gz43_262550	546740	EFhand	rev	18.72
4688	2018.K14.gz43_264760	432970	zf-c2h2	for	48.43
4979	2041.C09.gz43_266976	556632	zf-c2h2	rev	20.88
5467	2067.I20.gz43_271090	551617	7tm_1	rev	19.77
5508	2068.F14.gz43_271375	561707	7tm_1	rev	24.27
5522	2068.D17.gz43_271421	554774	tgf-beta	for	18.24
5756	2176.J17.gz43_281945	412416	Dead_box_helic	for	37.64
6001	1561.C22.gz43_314731	447072	PH	for	31.95



Table 5						
SEQ ID NO	CLUSTER	PAIR AB	CLONES A	CLONES B	RATIO PLUS	RATIO MINUS
6	558147	12,13	3	12	-1	3.87
11	402353	12,13	13	4	3.36	-1
14	884	03,04	51	20	2.49	-1
14	884	15,17	1	10	-1	9.32
14	884	27,28	15	3	5.41	-1
14	884	28,29	3	21	-1	5.62
22	427571	08,09	6	0	8.38	-1
28	6342	30,31	0	7	-1	6.29
29	387530	30,31	2	24	-1	10.79
52	24210	08,09	2	13	-1	4.65
52	24210	21,22	0	11	-1	11.18
52	24210	23,24	1	9	-1	8.91
52	24210	25,26	12	2	5.79	-1
60	1300	25,26	6	0	5.79	-1
64	376808	08,09	0	8	-1	5.72
65	6342	30,31	0	7	-1	6.29
67	24210	08,09	2	13	-1	4.65
67	24210	21,22	0	11	-1	11.18
67	24210	23,24	1	9	-1	8.91
67	24210	25,26	12	2	5.79	-1
68	24210	08,09	2	13	-1	4.65
68	24210	21,22	0	11	-1	11.18
68	24210	23,24	1	9	-1	8.91
68	24210	25,26	12	2	5.79	-1
71	185432	03,04	0	26	-1	26.65
71	185432	08,09	10	33	-1	2.36
75	418763	15,16	15	3	5.28	-1
75	418763	15,17	15	2	8.05	-1
75	418763	27,29	11	0	14.84	-1
75	418763	28,29	5	0	6.23	-1
79	649035	27,28	0	7	-1	6.46
79	649035	28,29	7	0	8.72	-1
92	186594	25,26	12	0	11.58	-1
93	218904	08,09	6	1	8.38	-1
99	535955	15,17	1	10	-1	9.32
99	535955	16,17	0	10	-1	9.85
112	48238	08,09	6	1	8.38	-1
113	226324	15,17	0	8	-1	7.45
113	226324	16,17	0	8	-1	7.88
113	226324	27,29	5	0	6.75	-1
115	62016	16,17	0	6	-1	5.91
116	48238	08,09	6	1	8.38	-1
121	20453	25,26	3	13	-1	4.49
123	37805	08,09	10	0	13.97	-1
125	48238	08,09	6	1	8.38	-1
136	120049	15,17	10	2	5.37	-1

SEQ ID NO	CLUSTER	PAIR AB	CLONES A	CLONES B	RATIO PLUS	RATIO MINUS
140	446829	27,29	78	44	2.39	-1
147	147196	28,29	16	46	-1	2.31
147	147196	30,31	8	30	-1	3.37
153	446614	16,17	7	0	7.11	-1
160	463487	15,17	8	1	8.59	-1
170	417078	15,16	8	1	8.46	-1
170	417078	15,17	8	0	8.59	-1
176	446531	16,17	0	6	-1	5.91
178	380127	28,29	9	26	-1	2.32
199	468109	15,17	6	0	6.44	-1
199	468109	27,29	6	0	8.09	-1
199	468109	28,29	7	0	8.72	-1
200	447326	15,17	6	0	6.44	-1
219	650195	15,16	6	0	6.34	-1
219	650195	15,17	6	0	6.44	-1
238	470462	15,17	7	0	7.51	-1
242	466697	12,13	6	0	6.2	-1
248	447147	27,29	9	0	12.14	-1
255	447750	12,14	9	0	9.43	-1
255	447750	27,29	9	0	12.14	-1
255	447750	28,29	5	0	6.23	-1
261	560868	27,29	6	0	8.09	-1
276	640356	15,17	10	0	10.73	-1
287	649852	15,17	6	0	6.44	-1
292	446974	28,29	5	0	6.23	-1
307	643924	15,16	6	0	6.34	-1
307	643924	15,17	6	0	6.44	-1
309	452986	15,16	8	1	8.46	-1
320	449861	16,17	74	26	2.89	-1
320	449861	27,29	1	16	-1	11.86
326	450225	15,17	11	3	3.94	-1
326	450225	27,28	1	24	-1	22.16
326	450225	28,29	24	1	29.9	-1
327	452707	30,31	7	0	7.79	-1
337	452204	15,16	9	1	9.51	-1
337	452204	16,17	1	8	-1	7.88
337	452204	23,24	3	13	-1	4.29
337	452204	27,28	0	14	-1	12.93
337	452204	28,29	14	0	17.44	-1
343	639662	15,16	7	0	7.4	-1
343	639662	15,17	7	0	7.51	-1
351	448606	15,17	5	20	-1	3.73
351	448606	27,28	0	7	-1	6.46
374	475184	25,26	6	74	-1	12.78
374	475184	27,28	114	48	2.57	-1
374	475184	27,29	114	70	2.2	-1
374	475184	30,31	5	19	-1	3.42
403	555193	15,16	6	0	6.34	-1

SEQ ID NO	CLUSTER	PAIR AB	CLONES A	CLONES B	RATIO PLUS	RATIO MINUS
417	3	01,02	5284	2168	2.25	-1
417	3	08,09	1095	631	2.43	-1
417	3	18,20	2079	463	3.84	-1
417	3	19,20	1419	463	2.29	-1
417	3	27,29	993	3994	-1	2.98
417	3	28,29	786	3994	-1	4.08
419	237288	15,16	7	0	7.4	-1
419	237288	15,17	7	0	7.51	-1
432	639459	15,17	11	0	11.81	-1
432	639459	16,17	9	0	9.14	-1
467	639480	27,28	8	0	8.66	-1
467	639480	27,29	8	0	10.79	-1
468	644242	15,16	6	0	6.34	-1
468	644242	15,17	6	0	6.44	-1
475	640747	15,17	6	0	6.44	-1
488	640356	15,17	10	0	10.73	-1
490	31112	15,17	6	0	6.44	-1
490	31112	23,24	107	9	12.01	-1
500	23961	15,16	102	44	2.45	-1
500	23961	15,17	102	40	2.74	-1
500	23961	25,26	73	169	-1	2.4
514	645538	23,24	0	6	-1	5.94
517	556	25,26	29	57	-1	2.04
517	556	27,28	34	14	2.63	-1
517	556	28,29	14	43	-1	2.47
517	556	30,31	29	105	-1	3.26
554	446371	15,16	6	0	6.34	-1
558	640221	15,17	8	0	8.59	-1
566	5201	03,04	11	2	5.37	-1
566	5201	15,16	17	4	4.49	-1
566	5201	15,17	17	1	18.25	-1
566	5201	23,24	8	1	8.08	-1
566	5201	27,28	9	0	9.75	-1
566	5201	27,29	9	0	12.14	-1
570	639480	27,28	8	0	8.66	-1
570	639480	27,29	8	0	10.79	-1
577	649717	16,17	6	0	6.09	-1
587	557401	15,17	10	2	5.37	-1
609	650204	15,17	11	0	11.81	-1
624	645073	15,16	6	0	6.34	-1
624	645073	15,17	6	0	6.44	-1
637	981	18,19	1	9	-1	7.88
637	981	27,28	55	17	3.5	-1
637	981	28,29	17	47	-1	2.22
637	981	30,31	31	224	-1	6.5
661	448450	27,28	0	7	-1	6.46
661	448450	28,29	7	0	8.72	-1
662	643804	15,16	6	0	6.34	-1

SEQ ID NO	CLUSTER	PAIR AB	CLONES A	CLONES B	RATIO PLUS	RATIO MINUS
662	643804	15,17	6	0	6.44	-1
672	607430	15,16	6	0	6.34	-1
678	466697	12,13	6	0	6.2	-1
681	462659	15,16	7	0	7.4	-1
681	462659	15,17	7	0	7.51	-1
683	24730	21,22	0	12	-1	12.2
716	638854	15,16	32	11	3.07	-1
716	638854	15,17	32	0	34.35	-1
716	638854	16,17	11	0	11.17	-1
720	643594	15,16	7	0	7.4	-1
720	643594	15,17	7	0	7.51	-1
729	644442	27,28	0	7	-1	6.46
729	644442	28,29	7	0	8.72	-1
735	447035	16,17	8	1	8.12	-1
743	380550	27,28	14	5	3.03	-1
743	380550	27,29	14	0	18.89	-1
743	380550	28,29	5	0	6.23	-1
744	645538	23,24	0	6	-1	5.94
746	650773	15,17	6	0	6.44	-1
761	650517	15,16	6	0	6.34	-1
761	650517	15,17	6	0	6.44	-1
769	640356	15,17	10	0	10.73	-1
773	450559	16,17	2	11	-1	5.42
797	644242	15,16	6	0	6.34	-1
797	644242	15,17	6	0	6.44	-1
798	644407	30,31	6	0	6.67	-1
814	649170	27,29	6	0	8.09	-1
826	447326	15,17	6	0	6.44	-1
832	400741	23,24	37	14	2.67	-1
832	400741	30,31	19	2	10.57	-1
855	647952	15,16	6	0	6.34	-1
855	647952	15,17	6	0	6.44	-1
855	647952	28,29	8	1	9.97	-1
858	455413	23,24	4	17	-1	4.21
866	645092	15,17	8	0	8.59	-1
873	204	03,04	120	318	-1	2.72
873	204	15,17	35	82	-1	2.18
873	204	27,28	41	14	3.17	-1
873	204	27,29	41	24	2.3	-1
873	204	30,31	287	56	5.7	-1
887	645900	15,17	9	0	9.66	-1
887	645900	16,17	9	0	9.14	-1
887	645900	23,24	7	0	7.07	-1
905	557852	28,29	6	0	7.48	-1
918	451709	27,28	2	31	-1	14.31
918	451709	28,29	31	3	12.87	-1
939	448358	27,28	28	15	2.02	-1
945	639480	27,28	8	0	8.66	-1

SEQ ID NO	CLUSTER	PAIR AB	CLONES A	CLONES B	RATIO PLUS	RATIO MINUS
945	639480	27,29	8	0	10.79	-1
946	1318	01,02	17	42	-1	2.68
946	1318	03,04	42	88	-1	2.15
957	451361	23,24	1	8	-1	7.92
958	449891	15,16	8	1	8.46	-1
986	418763	15,16	15	3	5.28	-1
986	418763	15,17	15	2	8.05	-1
986	418763	27,29	11	0	14.84	-1
986	418763	28,29	5	0	6.23	-1
987	619635	25,26	7	0	6.76	-1
989	451899	15,17	9	1	9.66	-1
989	451899	27,28	4	21	-1	4.85
991	560860	27,28	0	7	-1	6.46
991	560860	28,29	7	0	8.72	-1
996	452775	27,28	1	9	-1	8.31
1006	649556	28,29	6	0	7.48	-1
1007	644611	15,16	7	0	7.4	-1
1007	644611	15,17	7	0	7.51	-1
1009	470462	15,17	7	0	7.51	-1
1010	645662	23,24	4	28	-1	6.93
1011	649259	15,16	7	0	7.4	-1
1011	649259	15,17	7	0	7.51	-1
1011	649259	27,28	8	0	8.66	-1
1011	649259	27,29	8	0	10.79	-1
1034	532307	16,17	0	7	-1	6.89
1044	414739	15,17	6	19	-1	2.95
1044	414739	16,17	2	19	-1	9.35
1047	238586	30,31	9	0	10.01	-1
1068	467057	23,24	0	7	-1	6.93
1090	549786	23,24	0	8	-1	7.92
1101	649259	15,16	7	0	7.4	-1
1101	649259	15,17	7	0	7.51	-1
1101	649259	27,28	8	0	8.66	-1
1101	649259	27,29	8	0	10.79	-1
1106	468689	15,16	6	0	6.34	-1
1106	468689	15,17	6	0	6.44	-1
1112	556325	16,17	1	8	-1	7.88
1123	645530	15,16	10	2	5.28	-1
1123	645530	15,17	10	0	10.73	-1
1132	452026	15,16	38	14	2.87	-1
1132	452026	27,28	7	26	-1	3.43
1132	452026	28,29	26	2	16.2	-1
1132	452026	30,31	9	2	5.01	-1
1134	612572	15,16	6	0	6.34	-1
1147	14157	28,29	6	0	7.48	-1
1151	454906	27,28	4	18	-1	4.16
1151	454906	28,29	18	2	11.21	-1
1154	62053	25,26	10	1	9.65	-1

SEQ ID NO	CLUSTER	PAIR AB	CLONES A	CLONES B	RATIO PLUS	RATIO MINUS
1180	645900	15,17	9	0	9.66	-1
1180	645900	16,17	9	0	9.14	-1
1180	645900	23,24	7	0	7.07	-1
1185	463824	15,16	6	0	6.34	-1
1185	463824	15,17	6	0	6.44	-1
1185	463824	27,28	0	8	-1	7.39
1185	463824	28,29	8	0	9.97	-1
1193	649617	28,29	5	0	6.23	-1
1208	452738	28,29	5	0	6.23	-1
1234	647232	16,17	9	0	9.14	-1
1234	647232	28,29	6	0	7.48	-1
1237	503122	25,26	8	178	-1	23.05
1237	503122	27,29	12	2	8.09	-1
1237	503122	30,31	22	98	-1	4
1238	515350	15,16	14	0	14.8	-1
1238	515350	15,17	14	3	5.01	-1
1244	648996	15,16	6	0	6.34	-1
1244	648996	15,17	6	0	6.44	-1
1255	416624	27,29	6	0	8.09	-1
1261	449956	12,13	6	0	6.2	-1
1261	449956	16,17	10	1	10.16	-1
1261	449956	28,29	10	0	12.46	-1
1261	449956	30,31	8	1	8.9	-1
1270	380477	15,17	7	0	7.51	-1
1276	645100	15,16	7	0	7.4	-1
1276	645100	15,17	7	0	7.51	-1
1278	554581	28,29	7	0	8.72	-1
1290	650820	16,17	8	0	8.12	-1
1306	646309	16,17	6	0	6.09	-1
1315	502683	15,16	6	0	6.34	-1
1315	502683	28,29	5	0	6.23	-1
1342	463487	15,17	8	1	8.59	-1
1352	446987	15,17	10	0	10.73	-1
1354	640922	27,28	0	7	-1	6.46
1354	640922	28,29	7	0	8.72	-1
1355	561793	30,31	6	0	6.67	-1
1382	649354	15,16	6	0	6.34	-1
1382	649354	15,17	6	0	6.44	-1
1386	507050	27,29	9	0	12.14	-1
1386	507050	28,29	7	0	8.72	-1
1392	649272	16,17	8	0	8.12	-1
1412	453470	15,16	12	1	12.68	-1
1412	453470	15,17	12	1	12.88	-1
1423	419255	15,16	11	0	11.63	-1
1423	419255	15,17	11	1	11.81	-1
1424	648996	15,16	6	0	6.34	-1
1424	648996	15,17	6	0	6.44	-1
1425	451361	23,24	1	8	-1	7.92

SEQ ID NO	CLUSTER	PAIR AB	CLONES A	CLONES B	RATIO PLUS	RATIO MINUS
1426	15296	27,28	6	0	6.5	-1
1429	643327	28,29	10	0	12.46	-1
1432	452646	28,29	5	0	6.23	-1
1442	651073	15,16	7	0	7.4	-1
1442	651073	15,17	7	0	7.51	-1
1442	651073	27,28	0	9	-1	8.31
1442	651073	28,29	9	2	5.61	-1
1452	213	03,04	17	4	4.15	-1
1452	213	08,09	137	403	-1	2.1
1452	213	21,22	2	14	-1	7.12
1452	213	27,28	4	43	-1	9.93
1452	213	27,29	4	47	-1	8.71
1452	213	30,31	123	35	3.91	-1
1468	268336	15,16	8	1	8.46	-1
1478	646060	15,16	13	3	4.58	-1
1478	646060	15,17	13	0	13.95	-1
1497	639378	27,28	8	0	8.66	-1
1497	639378	27,29	8	0	10.79	-1
1507	446910	25,26	80	346	-1	4.48
1507	446910	27,29	210	38	7.46	-1
1507	446910	28,29	210	38	6.88	-1
1508	447126	15,16	19	5	4.02	-1
1508	447126	16,17	5	20	-1	3.94
1508	447126	28,29	5	0	6.23	-1
1514	479131	23,24	1	13	-1	12.87
1523	284586	15,17	8	0	8.59	-1
1523	284586	27,28	0	17	-1	15.7
1523	284586	28,29	17	0	21.18	-1
1529	449437	15,16	14	3	4.93	-1
1529	449437	16,17	3	12	-1	3.94
1529	449437	27,28	0	8	-1	7.39
1529	449437	28,29	8	0	9.97	-1
1552	449438	27,29	5	0	6.75	-1
1552	449438	28,29	9	0	11.21	-1
1561	448152	27,28	1	17	-1	15.7
1561	448152	28,29	17	2	10.59	-1
1564	479880	23,24	0	7	-1	6.93
1594	449521	27,29	7	1	9.44	-1
1602	644190	16,17	6	0	6.09	-1
1620	639991	15,17	6	0	6.44	-1
1638	594994	28,29	6	0	7.48	-1
1660	376342	15,16	0	7	-1	6.62
1662	734646	15,16	0	14	-1	13.25
1662	734646	16,17	14	0	14.22	-1
1666	460284	23,24	6	0	6.06	-1
1666	460284	27,28	6	0	6.5	-1
1685	558412	30,31	6	0	6.67	-1
1689	640158	16,17	6	0	6.09	-1

SEQ ID NO	CLUSTER	PAIR AB	CLONES A	CLONES B	RATIO PLUS	RATIO MINUS
1706	209	01,02	9	36	-1	4.34
1706	209	03,04	445	205	2.12	-1
1706	209	15,16	36	188	-1	4.94
1706	209	15,17	36	145	-1	3.75
1706	209	18,19	0	12	-1	10.5
1706	209	19,20	12	1	8.98	-1
1706	209	21,22	19	101	-1	5.4
1706	209	27,28	250	36	7.52	-1
1706	209	27,29	250	69	4.89	-1
1713	423420	30,31	12	0	13.35	-1
1717	448758	23,24	12	27	-1	2.23
1736	470462	15,17	7	0	7.51	-1
1740	729779	15,16	0	8	-1	7.57
1740	729779	16,17	8	0	8.12	-1
1758	649722	15,17	8	0	8.59	-1
1758	649722	16,17	6	0	6.09	-1
1759	562137	23,24	8	0	8.08	-1
1769	27083	16,17	11	0	11.17	-1
1769	27083	25,26	17	56	-1	3.41
1769	27083	28,29	1	14	-1	11.24
1769	27083	30,31	31	99	-1	2.87
1784	498194	27,28	0	7	-1	6.46
1784	498194	28,29	7	0	8.72	-1
1813	734646	15,16	0	14	-1	13.25
1813	734646	16,17	14	0	14.22	-1
1816	730282	15,16	0	7	-1	6.62
1816	730282	16,17	7	0	7.11	-1
1834	640116	15,16	19	4	5.02	-1
1834	640116	15,17	19	0	20.39	-1
1842	465446	25,26	26	11	2.28	-1
1879	27083	16,17	11	0	11.17	-1
1879	27083	25,26	17	56	-1	3.41
1879	27083	28,29	1	14	-1	11.24
1879	27083	30,31	31	99	-1	2.87
1880	478458	27,29	5	0	6.75	-1
1892	734622	23,24	5	17	-1	3.37
1896	381623	15,16	10	2	5.28	-1
1896	381623	15,17	10	0	10.73	-1
1898	446575	27,28	1	10	-1	9.23
1898	446575	28,29	10	1	12.46	-1
1940	649106	15,17	7	0	7.51	-1
1971	727760	27,28	0	8	-1	7.39
1971	727760	28,29	8	0	9.97	-1
1972	454087	15,16	14	3	4.93	-1
1972	454087	15,17	14	1	15.03	-1
1972	454087	25,26	4	14	-1	3.63
1978	4584	01,02	1	11	-1	11.93
1978	4584	25,26	6	0	5.79	-1



SEQ ID NO	CLUSTER	PAIR AB	CLONES A	CLONES B	RATIO PLUS	RATIO MINUS
2009	734622	23,24	5	17	-1	3.37
2027	48619	30,31	6	0	6.67	-1
2033	646309	16,17	6	0	6.09	-1
2040	447150	23,24	0	6	-1	5.94
2041	728273	15,16	0	7	-1	6.62
2041	728273	16,17	7	0	7.11	-1
2048	438663	15,16	4	16	-1	3.78
2048	438663	25,26	97	210	-1	2.24
2048	438663	27,28	48	171	-1	3.29
2048	438663	28,29	171	58	3.67	-1
2048	438663	30,31	13	30	-1	2.07
2064	128773	15,16	4	25	-1	5.91
2064	128773	16,17	25	2	12.69	-1
2064	128773	25,26	79	261	-1	3.42
2064	128773	30,31	13	33	-1	2.28
2074	504513	15,17	6	0	6.44	-1
2082	549801	28,29	8	0	9.97	-1
2083	730484	23,24	1	12	-1	11.88
2100	606076	23,24	2	22	-1	10.89
2122	732712	15,16	0	7	-1	6.62
2122	732712	16,17	7	0	7.11	-1
2132	730059	15,16	0	6	-1	5.68
2132	730059	16,17	6	0	6.09	-1
2137	451184	16,17	14	4	3.55	-1
2140	152	03,04	153	566	-1	3.79
2140	152	08,09	136	395	-1	2.08
2140	152	15,16	59	194	-1	3.11
2140	152	15,17	59	455	-1	7.18
2140	152	16,17	194	455	-1	2.31
2140	152	21,22	232	565	-1	2.48
2140	152	30,31	75	211	-1	2.53
2150	648774	15,17	6	0	6.44	-1
2157	548275	25,26	16	3	5.15	-1
2159	479572	25,26	20	53	-1	2.75
2159	479572	28,29	96	55	2.17	-1
2200	448046	15,17	0	12	-1	11.18
2200	448046	16,17	3	12	-1	3.94
2200	448046	27,28	1	9	-1	8.31
2200	448046	28,29	9	0	11.21	-1
2204	732756	28,29	6	0	7.48	-1
2215	171511	15,16	0	7	-1	6.62
2215	171511	16,17	7	0	7.11	-1
2232	203793	16,17	12	3	4.06	-1
2232	203793	25,26	12	188	-1	16.23
2232	203793	27,28	185	66	3.04	-1
2232	203793	27,29	185	100	2.5	-1
2236	725825	15,16	0	8	-1	7.57
2236	725825	16,17	8	0	8.12	-1

SEQ ID NO	CLUSTER	PAIR AB	CLONES A	CLONES B	RATIO PLUS	RATIO MINUS
2276	407723	12,13	6	0	6.2	-1
2285	411128	12,13	24	8	3.1	-1
2285	411128	13,14	8	29	-1	3.57
2285	411128	18,19	387	158	2.8	-1
2285	411128	19,20	158	634	-1	5.36
2285	411128	25,26	6272	2943	2.06	-1
2285	411128	27,29	4900	2229	2.97	-1
2285	411128	28,29	4750	2229	2.65	-1
2289	726173	15,16	0	6	-1	5.68
2289	726173	16,17	6	0	6.09	-1
2322	732712	15,16	0	7	-1	6.62
2322	732712	16,17	7	0	7.11	-1
2337	4255	08,09	28	7	5.59	-1
2338	554080	16,17	1	9	-1	8.86
2358	4244	28,29	8	28	-1	2.81
2376	737087	28,29	5	0	6.23	-1
2378	735871	23,24	0	13	-1	12.87
2388	735292	15,16	0	9	-1	8.51
2388	735292	16,17	9	0	9.14	-1
2400	732223	27,29	5	0	6.75	-1
2401	595506	15,16	0	6	-1	5.68
2405	728884	15,16	0	8	-1	7.57
2405	728884	16,17	8	0	8.12	-1
2417	453508	25,26	27	9	2.9	-1
2417	453508	27,28	9	1	9.75	-1
2442	620462	23,24	2	19	-1	9.4
2445	735028	15,16	0	6	-1	5.68
2445	735028	16,17	6	0	6.09	-1
2449	447075	27,28	3	37	-1	11.39
2449	447075	28,29	37	14	3.29	-1
2483	645139	16,17	9	0	9.14	-1
2493	401368	27,29	48	32	2.02	-1
2514	451764	16,17	16	5	3.25	-1
2519	105056	15,16	1	10	-1	9.46
2529	560868	27,29	6	0	8.09	-1
2532	1030	21,22	13	3	4.26	-1
2532	1030	27,29	21	12	2.36	-1
2532	1030	30,31	14	5	3.11	-1
2545	455581	27,28	118	49	2.61	-1
2545	455581	27,29	118	29	5.49	-1
2545	455581	28,29	49	29	2.11	-1
2573	447550	23,24	6	0	6.06	-1
2573	447550	25,26	48	197	-1	4.25
2573	447550	30,31	6	20	-1	3
2591	447003	28,29	6	0	7.48	-1
2597	649852	15,17	6	0	6.44	-1
2598	650297	15,17	6	0	6.44	-1
2609	402516	30,31	6	0	6.67	-1

SEQ ID NO	CLUSTER	PAIR AB	CLONES A	CLONES B	RATIO PLUS	RATIO MINUS
2629	405016	16,17	15	4	3.81	-1
2655	734031	27,28	0	7	-1	6.46
2655	734031	28,29	7	0	8.72	-1
2663	736595	15,16	0	6	-1	5.68
2663	736595	16,17	6	0	6.09	-1
2669	734209	15,16	0	9	-1	8.51
2669	734209	16,17	9	0	9.14	-1
2673	561632	27,29	5	0	6.75	-1
2681	530883	15,16	0	7	-1	6.62
2682	729173	15,16	0	8	-1	7.57
2682	729173	16,17	8	0	8.12	-1
2685	726786	12,13	6	0	6.2	-1
2685	726786	15,16	0	10	-1	9.46
2685	726786	16,17	10	0	10.16	-1
2685	726786	30,31	6	0	6.67	-1
2687	448770	15,17	6	0	6.44	-1
2712	726449	27,28	16	1	17.33	-1
2712	726449	27,29	16	0	21.59	-1
2718	446752	12,14	1	12	-1	11.45
2750	289328	12,13	6	0	6.2	-1
2750	289328	30,31	8	1	8.9	-1
2772	81	15,16	30	79	-1	2.49
2772	81	15,17	30	114	-1	3.54
2772	81	18,19	0	46	-1	40.25
2772	81	19,20	46	4	8.6	-1
2772	81	27,29	49	175	-1	2.65
2772	81	30,31	52	116	-1	2.01
2775	220107	15,17	9	25	-1	2.59
2775	220107	28,29	9	39	-1	3.48
2780	402024	12,13	2	12	-1	5.81
2780	402024	12,14	2	11	-1	5.25
2782	451888	27,29	79	26	4.1	-1
2782	451888	28,29	70	26	3.35	-1
2791	731467	15,16	0	6	-1	5.68
2791	731467	16,17	6	0	6.09	-1
2801	724781	28,29	10	2	6.23	-1
2807	553850	28,29	5	0	6.23	-1
2849	555103	15,17	0	7	-1	6.52
2849	555103	23,24	0	6	-1	5.94
2861	735477	15,16	0	7	-1	6.62
2861	735477	16,17	7	0	7.11	-1
2878	736014	15,16	0	6	-1	5.68
2878	736014	16,17	6	0	6.09	-1
2879	42	08,09	190	121	2.19	-1
2879	42	27,28	792	286	3	-1
2879	42	28,29	286	1257	-1	3.53
2882	42	08,09	190	121	2.19	-1
2882	42	27,28	792	286	3	-1

SEQ ID NO	CLUSTER	PAIR AB	CLONES A	CLONES B	RATIO PLUS	RATIO MINUS
2882	42	28,29	286	1257	-1	3.53
2883	736014	15,16	0	6	-1	5.68
2883	736014	16,17	6	0	6.09	-1
2885	4470	03,04	8	0	7.81	-1
2885	4470	15,16	10	24	-1	2.27
2885	4470	15,17	10	0	10.73	-1
2885	4470	16,17	24	0	24.37	-1
2885	4470	25,26	7	0	6.76	-1
2897	554703	15,17	0	9	-1	8.38
2897	554703	16,17	1	9	-1	8.86
2898	546642	15,17	10	1	10.73	-1
2898	546642	16,17	22	1	22.34	-1
2910	732300	15,16	0	7	-1	6.62
2910	732300	16,17	7	0	7.11	-1
2938	892	15,16	0	6	-1	5.68
2938	892	27,28	6	0	6.5	-1
2938	892	27,29	6	0	8.09	-1
2941	546642	15,17	10	1	10.73	-1
2941	546642	16,17	22	1	22.34	-1
2949	734582	15,16	0	6	-1	5.68
2949	734582	16,17	6	0	6.09	-1
2983	448110	15,17	2	25	-1	11.65
2983	448110	16,17	1	25	-1	24.62
2994	450027	23,24	0	6	-1	5.94
2999	1015	08,09	10	31	-1	2.22
2999	1015	12,14	62	28	2.32	-1
2999	1015	13,14	84	28	3.05	-1
2999	1015	30,31	31	6	5.75	-1
3006	402070	27,28	1	9	-1	8.31
3006	402070	28,29	9	0	11.21	-1
3015	446964	15,17	1	12	-1	11.18
3020	414739	15,17	6	19	-1	2.95
3020	414739	16,17	2	19	-1	9.35
3038	450410	16,17	0	7	-1	6.89
3044	553316	15,16	12	3	4.23	-1
3057	14573	30,31	11	3	4.08	-1
3093	503452	16,17	1	8	-1	7.88
3099	553158	16,17	1	8	-1	7.88
3113	551289	23,24	0	7	-1	6.93
3121	554581	28,29	7	0	8.72	-1
3126	447667	16,17	0	11	-1	10.83
3126	447667	27,28	22	10	2.38	-1
3126	447667	27,29	22	3	9.89	-1
3126	447667	28,29	10	3	4.15	-1
3129	551617	15,16	9	0	9.51	-1
3129	551617	16,17	0	7	-1	6.89
3145	551117	16,17	0	6	-1	5.91
3150	1093	27,28	43	20	2.33	-1

SEQ ID NO	CLUSTER	PAIR AB	CLONES A	CLONES B	RATIO PLUS	RATIO MINUS
3150	1093	30,31	5	18	-1	3.24
3151	2284	23,24	6	17	-1	2.8
3151	2284	25,26	17	4	4.1	-1
3151	2284	30,31	14	32	-1	2.05
3168	275	15,17	3	15	-1	4.66
3168	275	18,19	0	12	-1	10.5
3172	551718	15,17	0	8	-1	7.45
3192	143346	25,26	44	435	-1	10.24
3211	551553	28,29	7	0	8.72	-1
3248	556216	15,17	0	7	-1	6.52
3248	556216	16,17	0	7	-1	6.89
3291	446814	25,26	10	27	-1	2.8
3291	446814	27,29	8	1	10.79	-1
3301	550694	15,16	21	1	22.2	-1
3301	550694	15,17	21	7	3.22	-1
3307	450963	28,29	6	0	7.48	-1
3328	554764	25,26	32	0	30.89	-1
3339	550855	16,17	1	10	-1	9.85
3355	452506	15,16	8	1	8.46	-1
3355	452506	28,29	6	0	7.48	-1
3359	408130	30,31	10	0	11.12	-1
3363	549964	23,24	8	1	8.08	-1
3372	380127	28,29	9	26	-1	2.32
3378	549320	15,17	0	7	-1	6.52
3382	558103	27,28	1	11	-1	10.16
3382	558103	28,29	11	0	13.7	-1
3382	558103	30,31	6	0	6.67	-1
3383	548864	30,31	6	0	6.67	-1
3391	10397	03,04	10	0	9.76	-1
3391	10397	27,28	6	0	6.5	-1
3391	10397	27,29	6	0	8.09	-1
3393	561892	15,17	0	7	-1	6.52
3398	548965	16,17	4	14	-1	3.45
3435	549829	16,17	0	6	-1	5.91
3452	257547	23,24	29	8	3.66	-1
3452	257547	27,28	0	8	-1	7.39
3452	257547	28,29	8	0	9.97	-1
3457	450255	16,17	0	6	-1	5.91
3469	448663	28,29	5	0	6.23	-1
3474	559575	27,28	1	9	-1	8.31
3474	559575	28,29	9	0	11.21	-1
3485	4244	28,29	8	28	-1	2.81
3499	349	01,02	78	160	-1	2.22
3499	349	03,04	91	3	29.59	-1
3499	349	12,13	33	13	2.62	-1
3499	349	13,14	13	28	-1	2.12
3499	349	16,17	15	35	-1	2.3
3499	349	27,28	12	29	-1	2.23

SEQ ID NO	CLUSTER	PAIR AB	CLONES A	CLONES B	RATIO PLUS	RATIO MINUS
3512	498194	27,28	0	7	-1	6.46
3512	498194	28,29	7	0	8.72	-1
3518	453667	23,24	3	12	-1	3.96
3538	275	15,17	3	15	-1	4.66
3538	275	18,19	0	12	-1	10.5
3559	447429	27,28	0	8	-1	7.39
3559	447429	28,29	8	0	9.97	-1
3563	449956	12,13	6	0	6.2	-1
3563	449956	16,17	10	1	10.16	-1
3563	449956	28,29	10	0	12.46	-1
3563	449956	30,31	8	1	8.9	-1
3573	134392	23,24	20	2	10.1	-1
3573	134392	25,26	0	6	-1	6.22
3583	551380	16,17	4	14	-1	3.45
3600	450242	30,31	7	0	7.79	-1
3603	451361	23,24	1	8	-1	7.92
3608	402916	23,24	8	0	8.08	-1
3608	402916	27,28	22	5	4.76	-1
3608	402916	27,29	22	4	7.42	-1
3613	555502	16,17	0	9	-1	8.86
3619	461	15,16	14	39	-1	2.64
3619	461	15,17	14	34	-1	2.26
3619	461	18,19	1	10	-1	8.75
3619	461	19,20	10	0	7.48	-1
3619	461	27,29	41	124	-1	2.24
3619	461	28,29	37	124	-1	2.69
3619	461	30,31	21	119	-1	5.09
3625	450867	15,16	7	0	7.4	-1
3627	502683	15,16	6	0	6.34	-1
3627	502683	28,29	5	0	6.23	-1
3637	447405	15,17	27	83	-1	2.86
3637	447405	18,20	2	11	-1	6.43
3637	447405	19,20	0	11	-1	14.71
3637	447405	27,29	163	60	3.66	-1
3637	447405	30,31	14	36	-1	2.31
3641	560984	16,17	0	6	-1	5.91
3650	554604	15,17	0	7	-1	6.52
3662	447858	15,16	12	3	4.23	-1
3721	555830	15,16	16	2	8.46	-1
3721	555830	15,17	16	2	8.59	-1
3731	562550	16,17	0	6	-1	5.91
3736	873	15,17	6	21	-1	3.26
3736	873	27,29	15	50	-1	2.47
3736	873	28,29	17	50	-1	2.36
3736	873	30,31	14	32	-1	2.05
3744	126	15,16	103	260	-1	2.39
3744	126	15,17	103	571	-1	5.16
3744	126	16,17	260	571	-1	2.16

SEQ ID NO	CLUSTER	PAIR AB	CLONES A	CLONES B	RATIO PLUS	RATIO MINUS
3744	126	18,19	4	37	-1	8.09
3744	126	18,20	4	13	-1	3.8
3744	126	19,20	37	13	2.13	-1
3744	126	27,28	638	323	2.14	-1
3762	555103	15,17	0	7	-1	6.52
3762	555103	23,24	0	6	-1	5.94
3774	531145	28,29	6	0	7.48	-1
3782	129715	08,09	3	27	-1	6.44
3807	554764	25,26	32	0	30.89	-1
3810	556561	15,17	0	10	-1	9.32
3810	556561	16,17	1	10	-1	9.85
3823	553787	28,29	10	0	12.46	-1
3848	556759	12,13	8	1	8.26	-1
3848	556759	15,16	11	2	5.81	-1
3848	556759	16,17	2	18	-1	8.86
3848	556759	27,29	21	1	28.33	-1
3848	556759	28,29	18	1	22.43	-1
3848	556759	30,31	10	1	11.12	-1
3857	503452	16,17	1	8	-1	7.88
3861	2284	23,24	6	17	-1	2.8
3861	2284	25,26	17	4	4.1	-1
3861	2284	30,31	14	32	-1	2.05
3864	560984	16,17	0	6	-1	5.91
3873	551444	23,24	6	0	6.06	-1
3881	548858	16,17	0	11	-1	10.83
3885	411113	16,17	0	6	-1	5.91
3894	594994	28,29	6	0	7.48	-1
3904	562550	16,17	0	6	-1	5.91
3922	460445	16,17	0	6	-1	5.91
3925	931	01,02	23	59	-1	2.78
3925	931	18,19	0	9	-1	7.88
3925	931	30,31	70	195	-1	2.5
3940	388688	27,29	8	2	5.4	-1
3940	388688	28,29	17	2	10.59	-1
4009	380127	28,29	9	26	-1	2.32
4016	378459	23,24	1	9	-1	8.91
4017	550571	16,17	0	6	-1	5.91
4036	607430	15,16	6	0	6.34	-1
4039	558098	15,16	6	0	6.34	-1
4039	558098	30,31	9	1	10.01	-1
4041	557928	16,17	0	6	-1	5.91
4079	557928	16,17	0	6	-1	5.91
4100	450242	30,31	7	0	7.79	-1
4106	448450	27,28	0	7	-1	6.46
4106	448450	28,29	7	0	8.72	-1
4111	560538	16,17	0	8	-1	7.88
4115	420892	13,14	0	6	-1	5.91
4138	450883	28,29	5	0	6.23	-1

SEQ ID NO	CLUSTER	PAIR AB	CLONES A	CLONES B	RATIO PLUS	RATIO MINUS
4139	638971	15,17	8	0	8.59	-1
4149	643804	15,16	6	0	6.34	-1
4149	643804	15,17	6	0	6.44	-1
4150	97909	27,28	31	12	2.8	-1
4150	97909	28,29	12	35	-1	2.34
4150	97909	30,31	18	54	-1	2.7
4157	603857	27,29	17	3	7.64	-1
4157	603857	28,29	31	3	12.87	-1
4162	641683	15,16	8	0	8.46	-1
4162	641683	15,17	8	0	8.59	-1
4176	640889	15,17	6	0	6.44	-1
4178	643594	15,16	7	0	7.4	-1
4178	643594	15,17	7	0	7.51	-1
4195	641728	28,29	7	1	8.72	-1
4203	359500	12,13	14	4	3.61	-1
4203	359500	27,28	18	4	4.87	-1
4203	359500	28,29	4	17	-1	3.41
4203	359500	30,31	8	22	-1	2.47
4204	649558	15,16	12	3	4.23	-1
4204	649558	15,17	12	0	12.88	-1
4231	451401	15,17	9	1	9.66	-1
4234	417259	15,17	4	14	-1	3.26
4234	417259	16,17	1	14	-1	13.79
4240	453006	27,28	0	8	-1	7.39
4240	453006	28,29	8	0	9.97	-1
4247	498194	27,28	0	7	-1	6.46
4247	498194	28,29	7	0	8.72	-1
4250	556326	16,17	0	8	-1	7.88
4257	649106	15,17	7	0	7.51	-1
4264	284586	15,17	8	0	8.59	-1
4264	284586	27,28	0	17	-1	15.7
4264	284586	28,29	17	0	21.18	-1
4265	642535	27,28	0	8	-1	7.39
4265	642535	28,29	8	0	9.97	-1
4270	801	30,31	25	7	3.97	-1
4271	449956	12,13	6	0	6.2	-1
4271	449956	16,17	10	1	10.16	-1
4271	449956	28,29	10	0	12.46	-1
4271	449956	30,31	8	1	8.9	-1
4283	455113	27,29	11	3	4.95	-1
4283	455113	28,29	13	3	5.4	-1
4285	1558	03,04	25	97	-1	3.98
4287	546705	16,17	0	6	-1	5.91
4293	452212	15,16	6	0	6.34	-1
4298	37862	25,26	14	0	13.51	-1
4299	644609	15,17	7	0	7.51	-1
4311	553877	16,17	1	8	-1	7.88
4319	550562	27,28	1	9	-1	8.31



SEQ ID NO	CLUSTER	PAIR AB	CLONES A	CLONES B	RATIO PLUS	RATIO MINUS
4319	550562	28,29	9	1	11.21	-1
4320	648320	15,16	6	0	6.34	-1
4320	648320	15,17	6	0	6.44	-1
4327	27083	16,17	11	0	11.17	-1
4327	27083	25,26	17	56	-1	3.41
4327	27083	28,29	1	14	-1	11.24
4327	27083	30,31	31	99	-1	2.87
4336	453079	16,17	8	1	8.12	-1
4346	561558	28,29	6	0	7.48	-1
4349	451037	23,24	5	15	-1	2.97
4358	639232	23,24	0	6	-1	5.94
4358	639232	25,26	10	0	9.65	-1
4358	639232	30,31	9	0	10.01	-1
4361	461835	15,16	7	0	7.4	-1
4361	461835	28,29	5	0	6.23	-1
4366	1093	27,28	43	20	2.33	-1
4366	1093	30,31	5	18	-1	3.24
4371	644240	15,17	7	0	7.51	-1
4375	388688	27,29	8	2	5.4	-1
4375	388688	28,29	17	2	10.59	-1
4380	648996	15,16	6	0	6.34	-1
4380	648996	15,17	6	0	6.44	-1
4406	449836	15,17	8	1	8.59	-1
4413	640525	15,16	7	0	7.4	-1
4413	640525	15,17	7	0	7.51	-1
4417	388085	15,16	9	0	9.51	-1
4417	388085	15,17	9	0	9.66	-1
4421	448787	15,17	23	9	2.74	-1
4421	448787	16,17	22	9	2.48	-1
4435	554742	16,17	0	6	-1	5.91
4441	549640	27,28	0	7	-1	6.46
4441	549640	30,31	15	6	2.78	-1
4445	530774	15,17	5	16	-1	2.98
4446	375814	15,16	8	0	8.46	-1
4446	375814	15,17	8	1	8.59	-1
4447	446789	15,16	16	5	3.38	-1
4450	503491	16,17	6	0	6.09	-1
4452	639441	23,24	1	8	-1	7.92
4454	649035	27,28	0	7	-1	6.46
4454	649035	28,29	7	0	8.72	-1
4461	470602	15,16	12	1	12.68	-1
4461	470602	16,17	1	9	-1	8.86
4477	453708	15,17	1	19	-1	17.7
4477	453708	16,17	1	19	-1	18.71
4483	551527	15,17	0	7	-1	6.52
4503	549945	15,16	12	2	6.34	-1
4503	549945	15,17	12	2	6.44	-1
4505	391511	27,28	8	0	8.66	-1

SEQ ID NO	CLUSTER	PAIR AB	CLONES A	CLONES B	RATIO PLUS	RATIO MINUS
4515	420686	16,17	0	8	-1	7.88
4517	551995	28,29	7	0	8.72	-1
4523	451032	15,16	6	0	6.34	-1
4538	557852	28,29	6	0	7.48	-1
4542	554500	15,16	6	0	6.34	-1
4550	43642	16,17	0	6	-1	5.91
4551	595506	15,16	0	6	-1	5.68
4553	555702	15,16	11	2	5.81	-1
4556	519109	23,24	1	34	-1	33.65
4557	450829	15,17	0	8	-1	7.45
4557	450829	16,17	0	8	-1	7.88
4598	386940	27,28	0	14	-1	12.93
4598	386940	28,29	14	0	17.44	-1
4611	375380	15,17	1	9	-1	8.38
4611	375380	16,17	0	9	-1	8.86
4619	553850	28,29	5	0	6.23	-1
4627	557401	15,17	10	2	5.37	-1
4632	349744	16,17	0	6	-1	5.91
4635	449437	15,16	14	3	4.93	-1
4635	449437	16,17	3	12	-1	3.94
4635	449437	27,28	0	8	-1	7.39
4635	449437	28,29	8	0	9.97	-1
4645	562292	16,17	0	6	-1	5.91
4652	224812	16,17	31	63	-1	2
4652	224812	25,26	200	686	-1	3.55
4652	224812	27,29	84	38	2.98	-1
4652	224812	28,29	80	38	2.62	-1
4670	446739	28,29	5	0	6.23	-1
4684	247	15,17	15	44	-1	2.73
4684	247	18,19	0	15	-1	13.13
4684	247	30,31	11	51	-1	4.17
4686	491799	15,16	0	11	-1	10.41
4691	461	15,16	14	39	-1	2.64
4691	461	15,17	14	34	-1	2.26
4691	461	18,19	1	10	-1	8.75
4691	461	19,20	10	0	7.48	-1
4691	461	27,29	41	124	-1	2.24
4691	461	28,29	37	124	-1	2.69
4691	461	30,31	21	119	-1	5.09
4696	562292	16,17	0	6	-1	5.91
4702	487182	15,17	2	11	-1	5.12
4702	487182	16,17	1	11	-1	10.83
4702	487182	25,26	3	72	-1	24.87
4706	561046	16,17	0	6	-1	5.91
4746	556040	23,24	2	15	-1	7.42
4748	452822	15,16	9	23	-1	2.42
4758	455820	16,17	0	7	-1	6.89
4767	556802	28,29	8	0	9.97	-1

SEQ ID NO	CLUSTER	PAIR AB	CLONES A	CLONES B	RATIO PLUS	RATIO MINUS
4771	465446	25,26	26	11	2.28	-1
4826	452775	27,28	1	9	-1	8.31
4827	560868	27,29	6	0	8.09	-1
4835	558534	16,17	0	7	-1	6.89
4850	549591	15,17	2	24	-1	11.18
4850	549591	16,17	7	24	-1	3.38
4885	27586	12,13	7	22	-1	3.04
4885	27586	12,14	7	21	-1	2.86
4885	27586	21,22	9	0	8.85	-1
4885	27586	25,26	17	0	16.41	-1
4885	27586	30,31	24	0	26.69	-1
4888	561558	28,29	6	0	7.48	-1
4900	2435	15,17	0	8	-1	7.45
4900	2435	27,28	0	7	-1	6.46
4900	2435	28,29	7	1	8.72	-1
4907	554604	15,17	0	7	-1	6.52
4922	559057	15,17	0	7	-1	6.52
4927	553877	16,17	1	8	-1	7.88
4950	549911	16,17	0	6	-1	5.91
4959	409612	25,26	6	0	5.79	-1
4972	226324	15,17	0	8	-1	7.45
4972	226324	16,17	0	8	-1	7.88
4972	226324	27,29	5	0	6.75	-1
4986	413915	12,13	6	0	6.2	-1
4986	413915	12,14	6	0	6.29	-1
5007	2284	23,24	6	17	-1	2.8
5007	2284	25,26	17	4	4.1	-1
5007	2284	30,31	14	32	-1	2.05
5018	365634	15,16	12	2	6.34	-1
5018	365634	16,17	2	14	-1	6.89
5018	365634	25,26	10	0	9.65	-1
5026	549829	16,17	0	6	-1	5.91
5033	411113	16,17	0	6	-1	5.91
5042	1079	03,04	24	55	-1	2.35
5042	1079	28,29	16	44	-1	2:21
5047	397581	28,29	6	20	-1	2.68
5047	397581	27,29	1	20	-1	14.83
5051	23961	15,16	102	44	2.45	-1
5051	23961	15,17	102	40	2.74	-1
5051	23961	25,26	73	169	-1	2.4
5058	446900	15,17	1	11	-1	10.25
5058	446900	16,17	2	11	-1	5.42
5065	448677	15,16	11	1	11.63	-1
5067	560538	16,17	0	8	-1	7.88
5079	62458	15,16	2	14	-1	6.62
5079	62458	15,17	2	11	-1	5.12
5079	62458	25,26	20	227	-1	11.76
5079	62458	30,31	19	245	-1	11.59

SEQ ID NO	CLUSTER	PAIR AB	CLONES A	CLONES B	RATIO PLUS	RATIO MINUS
5102	556216	15,17	0	7	-1	6.52
5102	556216	16,17	0	7	-1	6.89
5117	549041	16,17	0	6	-1	5.91
5133	453004	27,28	0	8	-1	7.39
5133	453004	28,29	8	0	9.97	-1
5135	560868	27,29	6	0	8.09	-1
5147	403419	13,14	0	9	-1	8.87
5147	403419	27,29	7	0	9.44	-1
5161	559806	16,17	0	6	-1	5.91
5168	550562	27,28	1	9	-1	8.31
5168	550562	28,29	9	1	11.21	-1
5186	91178	15,17	0	7	-1	6.52
5188	561485	15,17	0	7	-1	6.52
5188	561485	16,17	0	7	-1	6.89
5195	558412	30,31	6	0	6.67	-1
5200	453846	15,17	0	11	-1	10.25
5221	562565	15,16	0	8	-1	7.57
5221	562565	27,28	11	1	11.91	-1
5221	562565	27,29	11	0	14.84	-1
5228	553705	15,16	12	0	12.68	-1
5228	553705	28,29	8	0	9.97	-1
5231	562459	16,17	2	10	-1	4.92
5231	562459	27,28	13	29	-1	2.06
5231	562459	27,29	13	1	17.54	-1
5231	562459	28,29	29	1	36.13	-1
5236	62458	15,16	2	14	-1	6.62
5236	62458	15,17	2	11	-1	5.12
5236	62458	25,26	20	227	-1	11.76
5236	62458	30,31	19	245	-1	11.59
5240	448741	28,29	6	0	7.48	-1
5249	451401	15,17	9	1	9.66	-1
5258	451802	15,17	0	9	-1	8.38
5258	451802	16,17	1	9	-1	8.86
5264	452775	27,28	1	9	-1	8.31
5268	92639	12,14	2	11	-1	5.25
5271	452500	27,28	0	15	-1	13.85
5271	452500	28,29	15	5	3.74	-1
5272	452204	15,16	9	1	9.51	-1
5272	452204	16,17	1	8	-1	7.88
5272	452204	23,24	3	13	-1	4.29
5272	452204	27,28	0	14	-1	12.93
5272	452204	28,29	14	0	17.44	-1
5273	447025	15,16	48	19	2.67	-1
5273	447025	27,28	0	8	-1	7.39
5273	447025	27,29	0	13	-1	9.64
5277	452052	15,17	8	1	8.59	-1
5277	452052	27,28	2	14	-1	6.46
5277	452052	28,29	14	0	17.44	-1

SEQ ID NO	CLUSTER	PAIR AB	CLONES A	CLONES B	RATIO PLUS	RATIO MINUS
5281	452142	15,16	1	10	-1	9.46
5281	452142	16,17	10	2	5.08	-1
5282	451994	27,28	4	17	-1	3.92
5297	4244	28,29	8	28	-1	2.81
5308	450262	21,22	0	8	-1	8.13
5308	450262	27,28	30	14	2.32	-1
5308	450262	28,29	14	46	-1	2.64
5311	452506	15,16	8	1	8.46	-1
5311	452506	28,29	6	0	7.48	-1
5313	7022	25,26	7	0	6.76	-1
5313	7022	27,28	4	16	-1	3.69
5313	7022	28,29	16	5	3.99	-1
5315	2930	01,02	3	14	-1	5.06
5315	2930	27,29	5	0	6.75	-1
5315	2930	28,29	7	0	8.72	-1
5317	454226	28,29	5	0	6.23	-1
5321	453470	15,16	12	1	12.68	-1
5321	453470	15,17	12	1	12.88	-1
5324	454050	27,28	0	7	-1	6.46
5338	454518	27,29	6	0	8.09	-1
5338	454518	28,29	6	0	7.48	-1
5350	23649	27,28	37	12	3.34	-1
5350	23649	27,29	37	0	49.92	-1
5350	23649	28,29	12	0	14.95	-1
5357	519109	23,24	1	34	-1	33.65
5360	453783	27,28	0	8	-1	7.39
5360	453783	28,29	8	0	9.97	-1
5365	454509	25,26	7	0	6.76	-1
5365	454509	27,28	6	0	6.5	-1
5366	454562	23,24	13	4	3.28	-1
5366	454562	25,26	7	0	6.76	-1
5370	453783	27,28	0	8	-1	7.39
5370	453783	28,29	8	0	9.97	-1
5373	801	30,31	25	7	3.97	-1
5374	453494	27,28	7	0	7.58	-1
5374	453494	30,31	6	0	6.67	-1
5375	453202	15,16	6	0	6.34	-1
5375	453202	16,17	0	11	-1	10.83
5381	387530	30,31	2	24	-1	10.79
5382	453846	15,17	0	11	-1	10.25
5391	551995	28,29	7	0	8.72	-1
5397	446531	16,17	0	6	-1	5.91
5401	453508	25,26	27	9	2.9	-1
5401	453508	27,28	9	1	9.75	-1
5413	560868	27,29	6	0	8.09	-1
5448	554742	16,17	0	6	-1	5.91
5467	551617	15,16	9	0	9.51	-1
5467	551617	16,17	0	7	-1	6.89

SEQ ID NO	CLUSTER	PAIR AB	CLONES A	CLONES B	RATIO PLUS	RATIO MINUS
5489	468672	15,16	6	0	6.34	-1
5489	468672	16,17	0	8	-1	7.88
5501	402836	12,13	130	63	2.13	-1
5501	402836	23,24	17	4	4.29	-1
5508	561707	27,29	6	0	8.09	-1
5508	561707	30,31	9	1	10.01	-1
5509	561180	15,16	11	2	5.81	-1
5513	562137	23,24	8	0	8.08	-1
5518	449356	15,17	7	21	-1	2.79
5518	449356	16,17	4	21	-1	5.17
5525	549511	15,17	0	7	-1	6.52
5525	549511	16,17	0	7	-1	6.89
5526	560700	16,17	0	6	-1	5.91
5535	452523	15,17	10	2	5.37	-1
5537	406092	18,19	16	2	9.14	-1
5537	406092	25,26	7	0	6.76	-1
5537	406092	27,28	1	26	-1	24.01
5537	406092	27,29	1	28	-1	20.76
5537	406092	30,31	13	4	3.61	-1
5542	235874	12,13	62	239	-1	3.73
5542	235874	12,14	62	317	-1	4.88
5542	235874	25,26	102	21	4.69	-1
5542	235874	27,28	73	16	4.94	-1
5542	235874	28,29	16	70	-1	3.51
5542	235874	30,31	119	9	14.71	-1
5550	452957	27,29	5	0	6.75	-1
5550	452957	28,29	6	0	7.48	-1
5554	455855	27,29	8	0	10.79	-1
5559	510254	15,16	17	1	17.97	-1
5559	510254	16,17	1	8	-1	7.88
5560	451812	27,29	7	1	9.44	-1
5565	450225	15,17	11	3	3.94	-1
5565	450225	27,28	1	24	-1	22.16
5565	450225	28,29	24	1	29.9	-1
5572	503122	25,26	8	178	-1	23.05
5572	503122	27,29	12	2	8.09	-1
5572	503122	30,31	22	98	-1	4
5578	446936	23,24	10	26	-1	2.57
5578	446936	25,26	17	38	-1	2.32
5578	446936	27,28	158	31	5.52	-1
5578	446936	27,29	158	27	7.89	-1
5589	453079	16,17	8	1	8.12	-1
5599	454226	28,29	5	0	6.23	-1
5600	452973	27,28	0	9	-1	8.31
5600	452973	28,29	9	2	5.61	-1
5606	452648	23,24	2	15	-1	7.42
5611	366607	27,28	1	12	-1	11.08
5611	366607	28,29	12	0	14.95	-1

SEQ ID NO	CLUSTER	PAIR AB	CLONES A	CLONES B	RATIO PLUS	RATIO MINUS
5617	521840	15,16	6	0	6.34	-1
5620	523674	28,29	5	0	6.23	-1
5624	452775	27,28	1	9	-1	8.31
5634	454460	27,28	0	13	-1	12.01
5634	454460	28,29	13	2	8.1	-1
5662	456001	28,29	10	1	12.46	-1
5665	450914	15,16	0	6	-1	5.68
5666	455855	27,29	8	0	10.79	-1
5688	400258	16,17	6	0	6.09	-1
5688	400258	27,28	7	0	7.58	-1
5697	2544	01,02	23	9	2.36	-1
5697	2544	03,04	13	30	-1	2.37
5699	402534	12,13	8	21	-1	2.54
5704	456567	28,29	5	0	6.23	-1
5710	455601	15,17	10	0	10.73	-1
5710	455601	16,17	8	0	8.12	-1
5712	402916	23,24	8	0	8.08	-1
5712	402916	27,28	22	5	4.76	-1
5712	402916	27,29	22	4	7.42	-1
5714	27586	12,13	7	22	-1	3.04
5714	27586	12,14	7	21	-1	2.86
5714	27586	21,22	9	0	8.85	-1
5714	27586	25,26	17	0	16.41	-1
5714	27586	30,31	24	0	26.69	-1
5732	407711	15,16	0	6	-1	5.68
5733	411113	16,17	0	6	-1	5.91
5742	400426	12,14	22	10	2.31	-1
5752	155374	15,16	6	0	6.34	-1
5752	155374	15,17	6	0	6.44	-1
5752	155374	27,28	27	1	29.24	-1
5752	155374	27,29	27	0	36.42	-1
5753	409612	25,26	6	0	5.79	-1
5759	1054	03,04	49	23	2.08	-1
5759	1054	12,14	54	24	2.36	-1
5759	1054	15,17	64	28	2.45	-1
5759	1054	18,20	3	19	-1	7.41
5759	1054	19,20	5	19	-1	5.08
5759	1054	27,29	64	31	2.79	-1
5759	1054	28,29	69	31	2.77	-1
5759	1054	30,31	27	15	2	-1
5761	400454	12,14	9	1	9.43	-1
5765	409589	27,29	5	0	6.75	-1
5768	20517	12,13	18	3	6.2	-1
5768	20517	13,14	3	18	-1	5.91
5769	413915	12,13	6	0	6.2	-1
5769	413915	12,14	6	0	6.29	-1
5772	401510	12,14	8	0	8.39	-1
5775	417259	15,17	4	14	-1	3.26

SEQ ID NO	CLUSTER	PAIR AB	CLONES A	CLONES B	RATIO PLUS	RATIO MINUS
5775	417259	16,17	1	14	-1	13.79
5776	20517	12,13	18	3	6.2	-1
5776	20517	13,14	3	18	-1	5.91
5778	402534	12,13	8	21	-1	2.54
5780	419255	15,16	11	0	11.63	-1
5780	419255	15,17	11	1	11.81	-1
5788	402070	27,28	1	9	-1	8.31
5788	402070	28,29	9	0	11.21	-1
5789	402070	27,28	1	9	-1	8.31
5789	402070	28,29	9	0	11.21	-1
5792	402353	12,13	13	4	3.36	-1
5794	163970	18,20	12	25	-1	2.44
5794	163970	19,20	7	25	-1	4.77
5794	163970	27,28	7	39	-1	5.15
5794	163970	28,29	39	7	6.94	-1
5794	163970	30,31	29	6	5.38	-1
5801	268336	15,16	8	1	8.46	-1
5807	20517	12,13	18	3	6.2	-1
5807	20517	13,14	3	18	-1	5.91
5822	420686	16,17	0	8	-1	7.88
5823	447579	23,24	3	13	-1	4.29
5823	447579	28,29	7	0	8.72	-1
5825	463824	15,16	6	0	6.34	-1
5825	463824	15,17	6	0	6.44	-1
5825	463824	27,28	0	8	-1	7.39
5825	463824	28,29	8	0	9.97	-1
5827	388688	27,29	8	2	5.4	-1
5827	388688	28,29	17	2	10.59	-1
5840	446964	15,17	1	12	-1	11.18
5860	403949	12,13	11	1	11.36	-1
5862	235874	12,13	62	239	-1	3.73
5862	235874	12,14	62	317	-1	4.88
5862	235874	25,26	102	21	4.69	-1
5862	235874	27,28	73	16	4.94	-1
5862	235874	28,29	16	70	-1	3.51
5862	235874	30,31	119	9	14.71	-1
5876	644342	27,29	6	0	8.09	-1
5897	644342	27,29	6	0	8.09	-1
5898	419479	23,24	2	11	-1	5.44
5906	451508	30,31	7	0	7.79	-1
5924	218416	16,17	0	6	-1	5.91
5933	463824	15,16	6	0	6.34	-1
5933	463824	15,17	6	0	6.44	-1
5933	463824	27,28	0	8	-1	7.39
5933	463824	28,29	8	0	9.97	-1
5934	389377	27,28	7	0	7.58	-1
5934	389377	30,31	10	1	11.12	-1
5943	18786	15,17	6	0	6.44	-1



SEQ ID NO	CLUSTER	PAIR AB	CLONES A	CLONES B	RATIO PLUS	RATIO MINUS
5943	18786	30,31	6	0	6.67	-1
5944	447494	15,16	26	8	3.44	-1
5966	1454	03,04	38	14	2.65	-1
5966	1454	12,13	37	15	2.55	-1
5966	1454	13,14	15	35	-1	2.3
5966	1454	25,26	12	3	3.86	-1
5966	1454	30,31	7	22	-1	2.83
5969	15296	27,28	6	0	6.5	-1
5979	446673	16,17	8	1	8.12	-1
5991	446341	28,29	6	0	7.48	-1
6002	379335	15,16	11	0	11.63	-1
6002	379335	15,17	11	0	11.81	-1
6003	228873	27,29	20	0	26.98	-1
6003	228873	28,29	14	0	17.44	-1
6004	446663	15,17	14	32	-1	2.13
6004	446663	16,17	6	32	-1	5.25
6004	446663	18,20	1	8	-1	9.36
6004	446663	19,20	0	8	-1	10.7

Table 6

Pt ID	Path ID	Grp	Anatom Loc	Size	Grade	Histo Grade	Local Invasion	Lymph Met	Lymph Met Incid	Reg Lymph Grade	Dist Met & Loc	Dist Met Grade	Comment
15	21	III	Ascending colon	4.0	T3	G2	Extending into subserosal adipose tissue	Pos	3/8	N1	Neg	MX	invasive adenocarcinoma, moderately differentiated, focal perineural invasion is seen
52	71	II	Cecum	9.0	T3	G3	Invasion through muscularis propria, subserosal involvement; ileocecal valve involvement	Neg	0/12	N0	Neg	M0	Hyperplastic polyp in appendix.
121	140	II	Sigmoid	6	T4	G2	Invasion of muscularis propria into serosa, involving submucosa of urinary bladder	Neg	0/34	N0	Neg	M0	Perineural invasion; donut anastomosis Neg. One tubulovillous and one tubular adenoma with no high grade dysplasia.
125	144	II	Cecum	6	T3	G2	Invasion through the muscularis propria into subserosal adipose tissue. Ileocecal junction.	Neg	0/19	N0	Neg	M0	patient history of metastatic melanoma
128	147	III	Transverse colon	5.0	T3	G2	Invasion of muscularis propria into pericolic fat	Pos	1/5	N1	Neg	M0	

Table 6

Pt ID	Path ID	Grp	Anatom Loc	Size	Grade	Histo Grade	Local Invasion	Lymph Met	Lymph Met Incid	Reg Lymph Grade	Dist Met & Loc	Dist Met Grade	Comment
130	149		Splenic flexure	5.5	T3		through wall and into surrounding adipose tissue	Pos	10/24	N2	Neg	M1	
133	152	II	Rectum	5.0	T3	G2	Invasion through muscularis propria into non-peritonealized pericolic tissue; gross configuration is annular.	Neg	0/9	N0	Neg	M0	Small separate tubular adenoma (0.4 cm)
141	160	IV	Cecum	5.5	T3	G2	Invasion of muscularis propria into pericolic adipose tissue, but not through serosa. Arising from tubular adenoma.	Pos	7/21	N2	Pos - Liver	M1	Perineural invasion identified adjacent to metastatic adenocarcinoma.
156	175	III	Hepatic flexure	3.8	T3	G2	Invasion through muscularis propria into subserosa/pericolic adipose, no serosal involvement. Gross configuration annular.	Pos	2/13	N1	Neg	M0	Separate tubulovillous and tubular adenomas

Table 6

Pt ID	Path ID	Grp	Anatom Loc	Size	Grade	Histo Grade	Local Invasion	Lymph Met	Lymph Met Incid	Reg Lymph Grade	Dist Met & Loc	Dist Met Grade	Comment
228	247	III	Rectum	5.8	T3	G2 to G3	Invasion through muscularis propria to involve subserosal, perirectal adipose, and serosa	Pos	1/8	N1	Neg	MX	Hyperplastic polyps
264	283	II	Ascending colon	5.5	T3	G2	Invasion through muscularis propria into subserosal adipose tissue.	Neg	0/10	N0	Neg	M0	Tubulovillous adenoma with high grade dysplasia
266	285	III	Transverse colon	9	T3	G2	Invades through muscularis propria to involve pericolic adipose, extends to serosa.	Neg	0/15	N1	Pos - Mesenteric deposit	MX	
268	287	I	Cecum	6.5	T2	G2	Invades full thickness of muscularis propria, but mesenteric adipose free of malignancy	Neg	0/12	N0	Neg	M0	
278	297	III	Rectum	4	T3	G2	Invasion into perirectal adipose tissue.	Pos	7/10	N2	Neg	M0	Descending colon polyps, no HGD or carcinoma identified.

Table 6

Pt ID	Path ID	Grp	Anatom Loc	Size	Grade	Histo Grade	Local Invasion	Lymph Met	Lymph Met Incid	Reg Lymph Grade	Dist Met & Loc	Dist Met Grade	Comment
296	315	III	Cecum	5.5	T3	G2	Invasion through muscularis propria and invades pericolic adipose tissue. Ileocecal junction.	Pos	2/12	N1	Neg	M0	Tubulovillous adenoma (2.0 cm) with no high grade dysplasia. Neg. liver biopsy.
339	358	II	Rectosigmoid	6	T3	G2	Extends into perirectal fat but does not reach serosa	Neg	0/6	N0	Neg	M0	1 hyperplastic polyp identified
341	360	II	Ascending colon	2 cm invasive	T3	G2	Invasion through muscularis propria to involve pericolic fat. Arising from villous adenoma.	Neg	0/4	N0	Neg	MX	
356	375	II	Sigmoid	6.5	T3	G2	Through colon wall into subserosal adipose tissue. No serosal spread seen.	Neg	0/4	N0	Neg	M0	
360	412	III	Ascending colon	4.3	T3	G2	Invasion thru muscularis propria to pericolic fat	Pos	1/5	N1	Neg	M0	Two mucosal polyps
392	444	IV	Ascending colon	2	T3	G2	Invasion through muscularis propria into subserosal adipose tissue, not serosa.	Pos	1/6	N1	Pos - Liver	M1	Tumor arising at prior ileocolic surgical anastomosis.

Table 6

Pt ID	Path ID	Grp	Anatom Loc	Size	Grade	Histo Grade	Local Invasion	Lymph Met	Lymph Met Incid	Reg Lymph Grade	Dist Met & Loc	Dist Met Grade	Comment
393	445	II	Cecum	6.0	T3	G2	Cecum, invades through muscularis propria to involve subserosal adipose tissue but not serosa.	Neg	0/21	N0	Neg	M0	
413	465	IV	Cecum	4.8	T3	G2	Invasive through muscularis to involve periserosal fat; abutting ileocecal junction.	Neg	0/7	N0	Pos - Liver	M1	redagnosis of oophorectomy path to metastatic colon cancer.
505	383	IV		7.5	T3	G2	Invasion through muscularis propria involving pericolic adipose, serosal surface uninvolved	Pos	2/17	N1	Pos - Liver	M1	Anatomical location of primary not notated in report. Evidence of chronic colitis.
517	395	IV	Sigmoid	3	T3	G2	penetrates muscularis propria, involves pericolic fat.	Pos	6/6	N2	Neg	M0	No mention of distant met in report

Table 6

Pt ID	Path ID	Grp	Anatom Loc	Size	Grade	Histo Grade	Local Invasion	Lymph Met	Lymph Met Incid	Reg Lymph Grade	Dist Met & Loc	Dist Met Grade	Comment
534	553	II	Ascending colon	12	T3	G3	Invasion through the muscularis propria involving pericolic fat. Serosa free of tumor.	Neg	0/8	N0	Neg	M0	Omentum with fibrosis and fat necrosis. Small bowel with acute and chronic serositis, focal abscess and adhesions.
546	565	IV	Ascending colon	5.5	T3	G2	Invasion through muscularis propria extensively through submucosal and extending to serosa.	Pos	6/12	N2	Pos - Liver	M1	
577	596	II	Cecum	11.5	T3	G2	Invasion through the bowel wall, into subserosal adipose. Serosal surface free of tumor.	Neg	0/58	N0	Neg	M0	Appendix dilated and fibrotic, but not involved by tumor

Table 6

Pt ID	Path ID	Grp	Anatom Loc	Size	Grade	Histo Grade	Local Invasion	Lymph Met	Lymph Met Incid	Reg Lymph Grade	Dist Met & Loc	Dist Met Grade	Comment
695	714	II	Cecum	14.0	T3	G2	extending through bowel wall into serosal fat	Neg	0/22	N0	Neg	MX	moderately differentiated adenocarcinoma with mucinous differentiation (% not stated), tubular adenoma and hyperplastic polyps present,
784	803	IV	Ascending colon	3.5	T3	G3	through muscularis propria into pericolic soft tissues	Pos	5/17	N2	Pos - Liver	M1	invasive poorly differentiated adenosquamous carcinoma
786	805	IV	Descending colon	9.5	T3	G2	through muscularis propria into pericolic fat, but not at serosal surface	Neg	0/12	N0	Pos - Liver	M1	moderately differentiated invasive adenocarcinoma
787	806	II	Rectosigmoid	2.5	T3	G2-G3	Invasion of muscularis propria into soft tissue	Neg		N0	Neg	MX	Peritumoral lymphocytic response; 5 LN examined in pericolic fat, no metastases observed.
789	808	IV	Cecum	5.0	T3	G2-G3	Extending through muscularis propria into pericolic fat	Pos	5/10	N2	Pos - Liver	M1	Three fungating lesions examined.



Table 6

Pt ID	Path ID	Grp	Anatom Loc	Size	Grade	Histo Grade	Local Invasion	Lymph Met	Lymph Met Incid	Reg Lymph Grade	Dist Met & Loc	Dist Met Grade	Comment
790	809	IV	Rectum	6.8	T3	G1-G2	Invading through muscularis propria into perirectal fat	Pos	3/13	N1	Pos - Liver	M1	
791	810	IV	Ascending colon	5.8	T3	G3	Through the muscularis propria into pericolic fat	Pos	13/25	N2	Pos - Liver	M1	poorly differentiated invasive colonic adenocarcinoma <sup>a</sup>
888	908	IV	Ascending colon	2.0	T2	G1	Into muscularis propria	Pos	3/21	N0	Pos - Liver	M1	well to moderately differentiated adenocarcinoma as; this patient has tumors of the ascending colon and the sigmoid colon
889	909	IV	Cecum	4.8	T3	G2	Through muscularis propria int subserosal tissue	Pos	1/4	N1	Pos - Liver	M1	moderately differentiated adenocarcinoma <sup>a</sup>
890	910	IV	Ascending colon		T3	G2	Through muscularis propria into subserosa.	Pos	11/15	N2	Pos - Liver	M1	
891	911	IV	Rectum	5.2	T3	G2	Invasion through muscularis propria into perirectal soft tissue	Pos	4/15	N2	Pos - Liver	M1	Perineural invasion present.

Table 6

Pt ID	Path ID	Grp	Anatom Loc	Size	Grade	Histo Grade	Local Invasion	Lymph Met	Lymph Met Incid	Reg Lymph Grade	Dist Met & Loc	Dist Met Grade	Comment
892	912	IV	Sigmoid	5.0	T3	G2	Invasion into pericolic sort tissue. Tumor focally invading skeletal muscle attached to colon.	Pos	1/28	N1	Pos - Liver, left and right lobe, omentum	M1	Perineural invasion present, extensive. Patient with a history of colon cancer.
893	913	IV	Transverse colon	6.0	T3	G2-G3	Through muscularis propria into pericolic fat	Pos	14/17	N2	Pos - Liver	M1	Perineural invasion focally present. Omentum mass, but resection with no tumor identified.
989	1009	IV	Sigmoid	6.0	T3	G2	Invasion through colon wall and focally involving subserosal tissue.	Pos	1/7	N1	Pos - Liver	M1	Primary adenocarcinoma arising from tubulovillous adenoma.

Table 8

SEQ ID NO	SpotID	T/N Colon >2x	T/N Colon <halfx	T/N Colon Num Ratios
6	43971	0.0	75.0	8.0
31	40453	0.0	42.9	7.0
40	40457	0.0	71.4	7.0
44	46308	0.0	50.0	8.0
50	45610	0.0	62.5	8.0
70	42816	0.0	50.0	8.0
72	44673	0.0	50.0	8.0
74	42422	0.0	37.5	8.0
77	43983	0.0	37.5	8.0
81	44679	0.0	50.0	8.0
84	42418	0.0	37.5	8.0
133	39755	0.0	42.9	7.0
139	44916	0.0	50.0	8.0
147	45618	0.0	37.5	8.0
149	44926	0.0	50.0	8.0
152	44216	0.0	37.5	8.0
153	38367	0.0	42.9	7.0
158	38357	0.0	57.1	7.0
161	41869	0.0	42.9	7.0
162	43508	0.0	37.5	8.0
164	38365	0.0	57.1	7.0
166	39069	0.0	42.9	7.0
171	39061	0.0	57.1	7.0
180	39767	0.0	42.9	7.0
184	43881	0.0	37.5	8.0
186	43873	0.0	37.5	8.0
195	39769	0.0	57.1	7.0
196	39775	0.0	57.1	7.0
197	46330	0.0	37.5	8.0
198	42471	0.0	37.5	8.0
200	41173	0.0	42.9	7.0
202	42479	0.0	50.0	8.0
216	39621	0.0	42.9	7.0
217	46007	0.0	50.0	8.0
218	46015	0.0	62.5	8.0
225	45301	0.0	37.5	8.0
228	45303	0.0	37.5	8.0
250	41033	0.0	57.1	7.0
260	41035	0.0	57.1	7.0
268	41027	0.0	42.9	7.0
274	41737	0.0	42.9	7.0
301	39647	0.0	42.9	7.0
307	38943	0.0	42.9	7.0

Table 8

SEQ ID NO	SpotID	T/N Colon >2x	T/N Colon <halfx	T/N Colon Num Ratios
309	38939	0.0	42.9	7.0
315	44939	0.0	37.5	8.0
324	42827	0.0	37.5	8.0
326	38231	0.0	42.9	7.0
334	42819	0.0	37.5	8.0
352	43521	0.0	62.5	8.0
358	45633	0.0	50.0	8.0
364	44931	0.0	50.0	8.0
365	45635	0.0	50.0	8.0
366	46345	0.0	37.5	8.0
390	44947	0.0	50.0	8.0
391	44247	0.0	50.0	8.0
403	43501	0.0	37.5	8.0
406	43489	0.0	50.0	8.0
407	44951	0.0	37.5	8.0
413	41755	0.0	42.9	7.0
420	43541	0.0	37.5	8.0
424	44953	0.0	50.0	8.0
426	46365	0.0	62.5	8.0
432	44909	0.0	50.0	8.0
435	38210	0.0	42.9	7.0
443	38928	0.0	42.9	7.0
444	44911	0.0	50.0	8.0
446	46361	0.0	50.0	8.0
450	39632	0.0	42.9	7.0
452	39620	0.0	42.9	7.0
455	46363	0.0	62.5	8.0
458	41736	0.0	57.1	7.0
464	38944	0.0	42.9	7.0
467	45605	0.0	62.5	8.0
468	45609	0.0	100.0	8.0
471	38228	0.0	57.1	7.0
472	41740	0.0	42.9	7.0
476	41032	0.0	42.9	7.0
480	39638	0.0	57.1	7.0
482	41760	0.0	42.9	7.0
490	41754	0.0	71.4	7.0
496	39980	0.0	57.1	7.0
497	46315	0.0	37.5	8.0
507	40674	0.0	42.9	7.0
509	38566	0.0	57.1	7.0
519	38590	0.0	42.9	7.0
539	42813	0.0	37.5	8.0

Table 8

SEQ ID NO	SpotID	T/N Colon >2x	T/N Colon <halfx	T/N Colon Num Ratios
554	43515	0.0	50.0	8.0
558	41400	0.0	42.9	7.0
560	40702	0.0	42.9	7.0
563	40000	0.0	42.9	7.0
573	38185	0.0	42.9	7.0
582	39587	0.0	42.9	7.0
587	44925	0.0	50.0	8.0
592	39597	0.0	57.1	7.0
593	39593	0.0	42.9	7.0
603	38893	0.0	42.9	7.0
606	42842	0.0	62.5	8.0
607	43540	0.0	50.0	8.0
611	42840	0.0	50.0	8.0
614	43548	0.0	37.5	8.0
617	43538	0.0	50.0	8.0
618	46340	0.0	37.5	8.0
644	39586	0.0	42.9	7.0
651	45656	0.0	37.5	8.0
654	44254	0.0	50.0	8.0
655	45652	0.0	37.5	8.0
666	46285	0.0	37.5	8.0
667	40290	0.0	42.9	7.0
668	40304	0.0	42.9	7.0
680	39592	0.0	42.9	7.0
682	44950	0.0	37.5	8.0
691	45571	0.0	37.5	8.0
702	45654	0.0	37.5	8.0
703	45660	0.0	37.5	8.0
705	40292	0.0	42.9	7.0
711	40294	0.0	42.9	7.0
722	46364	0.0	37.5	8.0
724	38892	0.0	42.9	7.0
733	40998	0.0	57.1	7.0
736	40996	0.0	57.1	7.0
738	41712	0.0	42.9	7.0
757	38196	0.0	42.9	7.0
773	44881	0.0	37.5	8.0
776	39610	0.0	42.9	7.0
790	41016	0.0	42.9	7.0
793	39942	0.0	42.9	7.0
795	41718	0.0	42.9	7.0
798	39938	0.0	42.9	7.0
801	46289	0.0	37.5	8.0

Table 8

SEQ ID NO	SpotID	T/N Colon >2x	T/N Colon <halfx	T/N Colon Num Ratios
804	41024	0.0	42.9	7.0
807	38536	0.0	71.4	7.0
810	39948	0.0	42.9	7.0
816	39236	0.0	71.4	7.0
818	38540	0.0	42.9	7.0
820	41720	0.0	42.9	7.0
821	41728	0.0	42.9	7.0
831	46293	0.0	37.5	8.0
843	41358	0.0	71.4	7.0
846	39954	0.0	57.1	7.0
850	41360	0.0	42.9	7.0
864	38550	0.0	42.9	7.0
866	38409	0.0	31.7	41.0
868	40652	0.0	42.9	7.0
881	42070	0.0	57.1	7.0
883	42072	0.0	57.1	7.0
884	42074	0.0	42.9	7.0
886	40658	0.0	42.9	7.0
889	41372	0.0	42.9	7.0
895	40670	0.0	42.9	7.0
905	38147	0.0	42.9	7.0
915	39563	0.0	42.9	7.0
916	38863	0.0	42.9	7.0
918	38859	0.0	42.9	7.0
937	40346	0.0	42.9	7.0
941	41046	0.0	42.9	7.0
945	45605	0.0	62.5	8.0
946	40326	0.0	71.4	7.0
948	40328	0.0	42.9	7.0
950	41032	0.0	42.9	7.0
955	40342	0.0	42.9	7.0
960	41742	0.0	42.9	7.0
962	41056	0.0	42.9	7.0
972	43215	0.0	50.0	8.0
974	43203	0.0	37.5	8.0
975	42497	0.0	37.5	8.0
981	42505	0.0	62.5	8.0
984	43209	0.0	50.0	8.0
985	38431	0.0	57.1	7.0
986	24379	0.0	36.6	41.0
989	43909	0.0	100.0	8.0
991	41667	0.0	42.9	7.0
992	40985	0.0	42.9	7.0

Table 8

SEQ ID NO	SpotID	T/N Colon >2x	T/N Colon <halfx	T/N Colon Num Ratios
996	38873	0.0	42.9	7.0
998	38875	0.0	42.9	7.0
999	40977	0.0	42.9	7.0
1001	38169	0.0	42.9	7.0
1005	40987	0.0	42.9	7.0
1006	40261	0.0	42.9	7.0
1010	39809	0.0	42.9	7.0
1015	40973	0.0	42.9	7.0
1016	39579	0.0	42.9	7.0
1018	40965	0.0	42.9	7.0
1024	40263	0.0	42.9	7.0
1026	39811	0.0	57.1	7.0
1028	40513	0.0	57.1	7.0
1031	39821	0.0	42.9	7.0
1032	38871	0.0	42.9	7.0
1038	38175	0.0	42.9	7.0
1053	40267	0.0	42.9	7.0
1054	40273	0.0	42.9	7.0
1057	40525	0.0	42.9	7.0
1064	41685	0.0	42.9	7.0
1066	40991	0.0	42.9	7.0
1067	41217	0.0	71.4	7.0
1072	39907	0.0	57.1	7.0
1076	41221	0.0	42.9	7.0
1085	42027	0.0	42.9	7.0
1106	41227	0.0	42.9	7.0
1112	41923	0.0	71.4	7.0
1114	41223	0.0	42.9	7.0
1124	38503	0.0	42.9	7.0
1130	41933	0.0	42.9	7.0
1132	40623	0.0	42.9	7.0
1135	38527	0.0	42.9	7.0
1138	39905	0.0	42.9	7.0
1141	40613	0.0	42.9	7.0
1142	40615	0.0	42.9	7.0
1146	39925	0.0	42.9	7.0
1147	41333	0.0	42.9	7.0
1152	40627	0.0	42.9	7.0
1153	41339	0.0	42.9	7.0
1157	39933	0.0	42.9	7.0
1159	40629	0.0	42.9	7.0
1166	42045	0.0	42.9	7.0
1167	39921	0.0	42.9	7.0

Table 8

SEQ ID NO	SpotID	T/N Colon >2x	T/N Colon <halfx	T/N Colon Num Ratios
1170	40637	0.0	71.4	7.0
1181	42035	0.0	42.9	7.0
1186	43931	0.0	37.5	8.0
1189	46029	0.0	37.5	8.0
1193	42523	0.0	37.5	8.0
1199	39829	0.0	42.9	7.0
1203	43923	0.0	62.5	8.0
1206	43229	0.0	50.0	8.0
1208	44629	0.0	37.5	8.0
1220	43219	0.0	50.0	8.0
1222	39835	0.0	100.0	7.0
1231	40529	0.0	100.0	7.0
1234	43921	0.0	37.5	8.0
1238	45319	0.0	50.0	8.0
1241	45313	0.0	37.5	8.0
1245	44627	0.0	37.5	8.0
1246	44631	0.0	37.5	8.0
1250	40531	0.0	42.9	7.0
1255	46035	0.0	62.5	8.0
1270	41233	0.0	85.7	7.0
1274	40537	0.0	42.9	7.0
1280	44637	0.0	37.5	8.0
1281	45335	0.0	37.5	8.0
1290	40535	0.0	57.1	7.0
1292	41241	0.0	42.9	7.0
1293	41943	0.0	42.9	7.0
1311	41947	0.0	42.9	7.0
1382	38765	0.0	57.1	7.0
1392	39467	0.0	57.1	7.0
1398	42861	0.0	62.5	8.0
1399	43559	0.0	37.5	8.0
1401	38146	0.0	37.5	8.0
1402	43553	0.0	37.5	8.0
1408	43555	0.0	42.9	7.0
1412	39463	0.0	71.4	7.0
1413	43557	0.0	42.9	7.0
1415	40175	0.0	42.9	7.0
1418	40167	0.0	42.9	7.0
1422	40260	0.0	37.5	8.0
1429	44965	0.0	37.5	8.0
1430	44969	0.0	42.9	7.0
1432	44967	0.0	42.9	7.0
1442	40165	0.0	42.9	7.0



Table 8

SEQ ID NO	SpotID	T/N Colon >2x	T/N Colon <halfx	T/N Colon Num Ratios
1446	44265	0.0	42.9	7.0
1448	38162	0.0	37.5	8.0
1450	41678	0.0	37.5	8.0
1452	40974	0.0	37.5	8.0
1454	41674	0.0	37.5	8.0
1458	46379	0.0	37.5	8.0
1463	41670	0.0	37.5	8.0
1467	42871	0.0	50.0	8.0
1472	38172	0.0	37.5	8.0
1474	44273	0.0	50.0	8.0
1475	44277	0.0	50.0	8.0
1476	43569	0.0	37.5	8.0
1483	38872	0.0	50.0	8.0
1486	43577	0.0	50.0	8.0
1492	39576	0.0	57.1	7.0
1493	44977	0.0	50.0	8.0
1501	39580	0.0	62.5	8.0
1502	45689	0.0	37.5	8.0
1503	44985	0.0	50.0	8.0
1504	45681	0.0	75.0	8.0
1507	39578	0.0	57.1	7.0
1508	40984	0.0	50.0	8.0
1510	39584	0.0	42.9	7.0
1512	40990	0.0	37.5	8.0
1514	46391	0.0	37.5	8.0
1516	41682	0.0	42.9	7.0
1526	38769	0.0	42.9	7.0
1530	44612	0.0	37.5	8.0
1532	44622	0.0	37.5	8.0
1548	39473	0.0	57.1	7.0
1550	42281	0.0	42.9	7.0
1553	45320	0.0	37.5	8.0
1554	39479	0.0	42.9	7.0
1560	42287	0.0	42.9	7.0
1561	45314	0.0	37.5	8.0
1562	45326	0.0	37.5	8.0
1567	42273	0.0	42.9	7.0
1568	43210	0.0	37.5	8.0
1573	43910	0.0	37.5	8.0
1575	42279	0.0	42.9	7.0
1584	46034	0.0	37.5	8.0
1585	43934	0.0	50.0	8.0
1586	43936	0.0	50.0	8.0

Table 8

SEQ ID NO	SpotID	T/N Colon >2x	T/N Colon <halfx	T/N Colon Num Ratios
1587	44632	0.0	50.0	8.0
1588	43222	0.0	50.0	8.0
1589	40187	0.0	42.9	7.0
1590	44626	0.0	50.0	8.0
1597	44640	0.0	50.0	8.0
1599	43232	0.0	37.5	8.0
1601	43930	0.0	37.5	8.0
1603	44628	0.0	37.5	8.0
1609	44638	0.0	37.5	8.0
1610	45332	0.0	50.0	8.0
1611	46042	0.0	37.5	8.0
1613	43228	0.0	37.5	8.0
1615	43932	0.0	37.5	8.0
1619	40183	0.0	57.1	7.0
1623	44260	0.0	37.5	8.0
1628	43562	0.0	62.5	8.0
1632	43564	0.0	37.5	8.0
1634	45666	0.0	50.0	8.0
1636	44968	0.0	37.5	8.0
1638	42852	0.0	37.5	8.0
1642	44974	0.0	50.0	8.0
1645	41587	0.0	42.9	7.0
1646	44266	0.0	37.5	8.0
1647	44268	0.0	37.5	8.0
1648	44962	0.0	37.5	8.0
1653	44972	0.0	37.5	8.0
1654	45668	0.0	50.0	8.0
1662	41593	0.0	42.9	7.0
1664	45676	0.0	50.0	8.0
1667	42866	0.0	62.5	8.0
1669	44274	0.0	37.5	8.0
1673	42874	0.0	50.0	8.0
1675	42876	0.0	37.5	8.0
1679	42289	0.0	57.1	7.0
1681	42880	0.0	37.5	8.0
1682	43580	0.0	50.0	8.0
1686	46384	0.0	37.5	8.0
1689	45682	0.0	37.5	8.0
1698	46396	0.0	50.0	8.0
1703	38406	0.0	57.1	7.0
1705	44282	0.0	37.5	8.0
1706	46400	0.0	37.5	8.0
1717	46388	0.0	37.5	8.0

Table 8

SEQ ID NO	SpotID	T/N Colon >2x	T/N Colon <halfx	T/N Colon Num Ratios
1722	38416	0.0	42.9	7.0
1727	42301	0.0	42.9	7.0
1728	44978	0.0	37.5	8.0
1729	42543	0.0	37.5	8.0
1732	42535	0.0	37.5	8.0
1733	45684	0.0	50.0	8.0
1737	44990	0.0	50.0	8.0
1738	45686	0.0	62.5	8.0
1739	46390	0.0	37.5	8.0
1740	42531	0.0	50.0	8.0
1746	43243	0.0	37.5	8.0
1747	43947	0.0	50.0	8.0
1749	46055	0.0	50.0	8.0
1753	44651	0.0	37.5	8.0
1756	45347	0.0	37.5	8.0
1757	42547	0.0	37.5	8.0
1758	39816	0.0	42.9	7.0
1760	44643	0.0	50.0	8.0
1763	42555	0.0	37.5	8.0
1764	39114	0.0	57.1	7.0
1770	43945	0.0	37.5	8.0
1771	44647	0.0	37.5	8.0
1776	45359	0.0	37.5	8.0
1777	42551	0.0	50.0	8.0
1781	46049	0.0	37.5	8.0
1785	42545	0.0	37.5	8.0
1787	43261	0.0	37.5	8.0
1788	44657	0.0	50.0	8.0
1793	43249	0.0	37.5	8.0
1794	43255	0.0	37.5	8.0
1796	43959	0.0	50.0	8.0
1797	40524	0.0	42.9	7.0
1801	40526	0.0	42.9	7.0
1808	43961	0.0	50.0	8.0
1814	44661	0.0	50.0	8.0
1816	40520	0.0	42.9	7.0
1819	46075	0.0	50.0	8.0
1821	46079	0.0	50.0	8.0
1822	45375	0.0	37.5	8.0
1823	41222	0.0	42.9	7.0
1826	45367	0.0	37.5	8.0
1827	46067	0.0	37.5	8.0
1831	41224	0.0	42.9	7.0

Table 8

SEQ ID NO	SpotID	T/N Colon >2x	T/N Colon <halfx	T/N Colon Num Ratios
1834	41230	0.0	57.1	7.0
1836	39204	0.0	42.9	7.0
1845	38504	0.0	42.9	7.0
1850	40612	0.0	42.9	7.0
1851	40616	0.0	42.9	7.0
1854	40614	0.0	42.9	7.0
1855	40624	0.0	42.9	7.0
1859	39912	0.0	42.9	7.0
1861	39918	0.0	42.9	7.0
1868	39906	0.0	42.9	7.0
1870	38528	0.0	42.9	7.0
1875	39226	0.0	42.9	7.0
1885	38514	0.0	42.9	7.0
1888	38522	0.0	42.9	7.0
1891	39230	0.0	42.9	7.0
1892	39922	0.0	42.9	7.0
1898	39924	0.0	42.9	7.0
1906	39936	0.0	42.9	7.0
1907	40626	0.0	42.9	7.0
1913	41240	0.0	57.1	7.0
1916	40225	0.0	42.9	7.0
1922	41641	0.0	42.9	7.0
1927	42036	0.0	42.9	7.0
1929	41938	0.0	42.9	7.0
1932	40235	0.0	42.9	7.0
1935	38117	0.0	42.9	7.0
1944	40929	0.0	42.9	7.0
1946	41952	0.0	42.9	7.0
1949	39527	0.0	57.1	7.0
1950	39533	0.0	42.9	7.0
1954	41944	0.0	42.9	7.0
1957	42046	0.0	42.9	7.0
1963	41342	0.0	42.9	7.0
1964	39535	0.0	42.9	7.0
1969	40544	0.0	42.9	7.0
1970	38821	0.0	42.9	7.0
1971	40231	0.0	42.9	7.0
1972	41647	0.0	42.9	7.0
1973	41344	0.0	42.9	7.0
1977	38823	0.0	42.9	7.0
1980	40943	0.0	42.9	7.0
1988	38831	0.0	42.9	7.0
1990	38127	0.0	42.9	7.0

Table 8

SEQ ID NO	SpotID	T/N Colon >2x	T/N Colon <halfx	T/N Colon Num Ratios
1992	42044	0.0	42.9	7.0
2007	40945	0.0	42.9	7.0
2008	40953	0.0	42.9	7.0
2013	38135	0.0	42.9	7.0
2015	40959	0.0	42.9	7.0
2022	40249	0.0	42.9	7.0
2034	39551	0.0	42.9	7.0
2036	40949	0.0	42.9	7.0
2038	41651	0.0	42.9	7.0
2042	38143	0.0	42.9	7.0
2043	38835	0.0	42.9	7.0
2045	38843	0.0	42.9	7.0
2060	41987	0.0	42.9	7.0
2068	40587	0.0	42.9	7.0
2072	39875	0.0	42.9	7.0
2076	40589	0.0	42.9	7.0
2077	38471	0.0	42.9	7.0
2079	38483	0.0	42.9	7.0
2081	41283	0.0	42.9	7.0
2120	39195	0.0	42.9	7.0
2121	39891	0.0	42.9	7.0
2125	39193	0.0	42.9	7.0
2130	39199	0.0	42.9	7.0
2158	40593	0.0	42.9	7.0
2163	40603	0.0	42.9	7.0
2177	42009	0.0	42.9	7.0
2185	39526	0.0	42.9	7.0
2187	39536	0.0	42.9	7.0
2193	40942	0.0	42.9	7.0
2195	38120	0.0	42.9	7.0
2199	40238	0.0	42.9	7.0
2202	40240	0.0	42.9	7.0
2204	39522	0.0	42.9	7.0
2206	39534	0.0	42.9	7.0
2208	42011	0.0	42.9	7.0
2214	42013	0.0	42.9	7.0
2224	38132	0.0	42.9	7.0
2229	40256	0.0	42.9	7.0
2235	42343	0.0	37.5	8.0
2236	43041	0.0	37.5	8.0
2237	38144	0.0	42.9	7.0
2239	39548	0.0	57.1	7.0
2243	38842	0.0	42.9	7.0

Table 8

SEQ ID NO	SpotID	T/N Colon >2x	T/N Colon <halfx	T/N Colon Num Ratios
2247	38142	0.0	42.9	7.0
2250	38138	0.0	42.9	7.0
2257	39552	0.0	57.1	7.0
2263	39544	0.0	42.9	7.0
2270	41650	0.0	42.9	7.0
2271	40952	0.0	42.9	7.0
2272	41652	0.0	42.9	7.0
2278	38470	0.0	42.9	7.0
2279	40954	0.0	42.9	7.0
2288	43753	0.0	50.0	8.0
2290	39176	0.0	57.1	7.0
2293	39874	0.0	42.9	7.0
2294	40590	0.0	42.9	7.0
2300	40592	0.0	42.9	7.0
2304	41292	0.0	42.9	7.0
2312	39180	0.0	42.9	7.0
2314	41294	0.0	42.9	7.0
2323	39192	0.0	42.9	7.0
2326	39888	0.0	42.9	7.0
2327	40584	0.0	42.9	7.0
2328	41282	0.0	42.9	7.0
2329	41990	0.0	42.9	7.0
2336	39184	0.0	42.9	7.0
2338	44459	0.0	62.5	8.0
2340	40586	0.0	42.9	7.0
2341	41992	0.0	42.9	7.0
2342	44457	0.0	37.5	8.0
2345	40580	0.0	42.9	7.0
2346	39186	0.0	85.7	7.0
2347	43747	0.0	50.0	8.0
2349	41288	0.0	42.9	7.0
2350	41986	0.0	42.9	7.0
2352	38494	0.0	71.4	7.0
2353	39188	0.0	85.7	7.0
2354	41996	0.0	42.9	7.0
2359	40608	0.0	42.9	7.0
2364	45165	0.0	50.0	8.0
2367	41312	0.0	42.9	7.0
2368	39198	0.0	42.9	7.0
2370	41306	0.0	42.9	7.0
2371	39904	0.0	57.1	7.0
2374	45163	0.0	37.5	8.0
2376	42002	0.0	42.9	7.0

Table 8

SEQ ID NO	SpotID	T/N Colon >2x	T/N Colon <halfx	T/N Colon Num Ratios
2380	41310	0.0	42.9	7.0
2383	39200	0.0	42.9	7.0
2386	42899	0.0	50.0	8.0
2388	45869	0.0	37.5	8.0
2390	42901	0.0	37.5	8.0
2393	45709	0.0	62.5	8.0
2400	42893	0.0	50.0	8.0
2404	43585	0.0	37.5	8.0
2408	43599	0.0	50.0	8.0
2412	43587	0.0	37.5	8.0
2413	44301	0.0	50.0	8.0
2414	46411	0.0	37.5	8.0
2415	42909	0.0	62.5	8.0
2422	42895	0.0	37.5	8.0
2423	44995	0.0	37.5	8.0
2424	42911	0.0	50.0	8.0
2426	45865	0.0	37.5	8.0
2429	42885	0.0	37.5	8.0
2432	42887	0.0	50.0	8.0
2434	45705	0.0	37.5	8.0
2439	42012	0.0	42.9	7.0
2442	43593	0.0	37.5	8.0
2448	42905	0.0	37.5	8.0
2449	44303	0.0	50.0	8.0
2456	45697	0.0	50.0	8.0
2468	44305	0.0	62.5	8.0
2469	43609	0.0	37.5	8.0
2471	45009	0.0	50.0	8.0
2475	44317	0.0	50.0	8.0
2476	45719	0.0	37.5	8.0
2477	43761	0.0	50.0	8.0
2478	46431	0.0	50.0	8.0
2480	44311	0.0	62.5	8.0
2483	45017	0.0	50.0	8.0
2484	46421	0.0	50.0	8.0
2485	44313	0.0	50.0	8.0
2487	45019	0.0	37.5	8.0
2489	46417	0.0	37.5	8.0
2491	46423	0.0	37.5	8.0
2496	45713	0.0	37.5	8.0
2498	46425	0.0	37.5	8.0
2500	45013	0.0	37.5	8.0
2502	44319	0.0	37.5	8.0

Table 8

SEQ ID NO	SpotID	T/N Colon >2x	T/N Colon <halfx	T/N Colon Num Ratios
2503	45723	0.0	37.5	8.0
2504	46427	0.0	37.5	8.0
2505	42534	0.0	37.5	8.0
2511	43938	0.0	37.5	8.0
2516	43950	0.0	37.5	8.0
2517	45360	0.0	37.5	8.0
2518	43944	0.0	37.5	8.0
2524	45348	0.0	37.5	8.0
2527	46052	0.0	37.5	8.0
2532	43946	0.0	37.5	8.0
2534	43236	0.0	37.5	8.0
2539	44650	0.0	37.5	8.0
2541	43242	0.0	50.0	8.0
2544	43244	0.0	50.0	8.0
2549	46056	0.0	50.0	8.0
2550	42556	0.0	37.5	8.0
2551	43262	0.0	50.0	8.0
2555	45169	0.0	37.5	8.0
2560	42550	0.0	37.5	8.0
2563	42552	0.0	37.5	8.0
2564	43966	0.0	50.0	8.0
2581	43968	0.0	37.5	8.0
2582	42554	0.0	50.0	8.0
2591	44660	0.0	37.5	8.0
2592	45362	0.0	37.5	8.0
2596	45376	0.0	62.5	8.0
2601	45364	0.0	37.5	8.0
2604	45374	0.0	37.5	8.0
2605	46066	0.0	37.5	8.0
2608	45368	0.0	37.5	8.0
2609	46078	0.0	50.0	8.0
2613	44668	0.0	50.0	8.0
2614	45370	0.0	37.5	8.0
2619	43592	0.0	37.5	8.0
2620	45875	0.0	37.5	8.0
2621	46068	0.0	75.0	8.0
2623	42882	0.0	37.5	8.0
2629	43588	0.0	37.5	8.0
2638	44296	0.0	37.5	8.0
2639	43401	0.0	50.0	8.0
2641	44298	0.0	37.5	8.0
2642	45710	0.0	50.0	8.0
2646	45008	0.0	50.0	8.0



Table 8

SEQ ID NO	SpotID	T/N Colon >2x	T/N Colon <halfx	T/N Colon Num Ratios
2647	42910	0.0	62.5	8.0
2648	43596	0.0	75.0	8.0
2649	45706	0.0	37.5	8.0
2655	46410	0.0	37.5	8.0
2658	44994	0.0	50.0	8.0
2662	45708	0.0	50.0	8.0
2666	46416	0.0	37.5	8.0
2667	42912	0.0	37.5	8.0
2671	42902	0.0	37.5	8.0
2673	44300	0.0	37.5	8.0
2676	42904	0.0	50.0	8.0
2677	43598	0.0	50.0	8.0
2686	42906	0.0	50.0	8.0
2688	42695	0.0	37.5	8.0
2689	46404	0.0	37.5	8.0
2690	42898	0.0	50.0	8.0
2694	45885	0.0	37.5	8.0
2703	42908	0.0	37.5	8.0
2704	44292	0.0	37.5	8.0
2710	46412	0.0	37.5	8.0
2711	44306	0.0	37.5	8.0
2713	43614	0.0	37.5	8.0
2715	43616	0.0	37.5	8.0
2718	43612	0.0	50.0	8.0
2726	43606	0.0	87.5	8.0
2727	43610	0.0	50.0	8.0
2729	43602	0.0	37.5	8.0
2732	45714	0.0	37.5	8.0
2733	43604	0.0	50.0	8.0
2739	45018	0.0	50.0	8.0
2755	45718	0.0	37.5	8.0
2812	46418	0.0	37.5	8.0
2885	46215	0.0	37.5	8.0
2966	45529	0.0	37.5	8.0
2983	46229	0.0	37.5	8.0
2984	45533	0.0	50.0	8.0
3006	43756	0.0	50.0	8.0
3011	43758	0.0	62.5	8.0
3082	46222	0.0	37.5	8.0
3093	46212	0.0	37.5	8.0
3129	42718	0.0	37.5	8.0
3145	42710	0.0	37.5	8.0
3176	43424	0.0	37.5	8.0

Table 8

SEQ ID NO	SpotID	T/N Colon >2x	T/N Colon <halfx	T/N Colon Num Ratios
3193	44822	0.0	37.5	8.0
3211	44818	0.0	50.0	8.0
3245	45860	0.0	50.0	8.0
3257	45858	0.0	37.5	8.0
3268	42356	0.0	37.5	8.0
3269	42364	0.0	37.5	8.0
3278	45862	0.0	37.5	8.0
3296	43064	0.0	37.5	8.0
3336	45170	0.0	37.5	8.0
3339	43768	0.0	50.0	8.0
3356	43776	0.0	50.0	8.0
3359	45176	0.0	50.0	8.0
3388	42698	0.0	50.0	8.0
3393	45184	0.0	37.5	8.0
3405	45878	0.0	37.5	8.0
3412	45884	0.0	37.5	8.0
3438	46020	0.0	37.5	8.0
3439	46032	0.0	50.0	8.0
3442	46026	0.0	37.5	8.0
3443	42516	0.0	50.0	8.0
3457	44117	0.0	50.0	8.0
3463	42719	0.0	50.0	8.0
3514	43423	0.0	50.0	8.0
3575	46233	0.0	37.5	8.0
3595	43054	0.0	50.0	8.0
3596	42352	0.0	37.5	8.0
3605	43746	0.0	50.0	8.0
3613	42366	0.0	50.0	8.0
3650	40101	0.0	42.9	7.0
3656	39407	0.0	42.9	7.0
3698	38695	0.0	42.9	7.0
3702	40107	0.0	42.9	7.0
3711	39401	0.0	42.9	7.0
3716	39405	0.0	42.9	7.0
3723	38697	0.0	42.9	7.0
3836	42213	0.0	42.9	7.0
3870	38717	0.0	42.9	7.0
3881	38719	0.0	42.9	7.0
3919	38707	0.0	42.9	7.0
3934	38713	0.0	42.9	7.0
3955	39419	0.0	42.9	7.0
4028	42274	0.0	42.9	7.0
4039	38772	0.0	42.9	7.0

Table 8

SEQ ID NO	SpotID	T/N Colon >2x	T/N Colon <halfx	T/N Colon Num Ratios
4041	42286	0.0	42.9	7.0
4045	38770	0.0	42.9	7.0
4055	42282	0.0	42.9	7.0
4059	42284	0.0	42.9	7.0
4097	38774	0.0	42.9	7.0
4124	40313	0.0	42.9	7.0
4131	45625	0.0	50.0	8.0
4137	41005	0.0	42.9	7.0
4140	38203	0.0	42.9	7.0
4145	46325	0.0	37.5	8.0
4146	39611	0.0	42.9	7.0
4147	40309	0.0	57.1	7.0
4153	45619	0.0	37.5	8.0
4163	41697	0.0	42.9	7.0
4166	38899	0.0	42.9	7.0
4170	38903	0.0	42.9	7.0
4171	41003	0.0	42.9	7.0
4173	40995	0.0	42.9	7.0
4175	46321	0.0	37.5	8.0
4177	41017	0.0	42.9	7.0
4182	42474	0.0	50.0	8.0
4195	42478	0.0	37.5	8.0
4197	41015	0.0	42.9	7.0
4212	41713	0.0	42.9	7.0
4214	42480	0.0	37.5	8.0
4217	43886	0.0	37.5	8.0
4228	43888	0.0	37.5	8.0
4240	44586	0.0	37.5	8.0
4252	43188	0.0	37.5	8.0
4254	45304	0.0	62.5	8.0
4263	45996	0.0	37.5	8.0
4275	46016	0.0	37.5	8.0
4277	43198	0.0	37.5	8.0
4279	44606	0.0	50.0	8.0
4282	42496	0.0	50.0	8.0
4285	43900	0.0	37.5	8.0
4286	44608	0.0	37.5	8.0
4288	43902	0.0	75.0	8.0
4290	46006	0.0	37.5	8.0
4293	43192	0.0	37.5	8.0
4296	42490	0.0	37.5	8.0
4299	43896	0.0	37.5	8.0
4305	42492	0.0	37.5	8.0

Table 8

SEQ ID NO	SpotID	T/N Colon >2x	T/N Colon <halfx	T/N Colon Num Ratios
4307	46008	0.0	50.0	8.0
4317	39941	0.0	42.9	7.0
4324	42053	0.0	42.9	7.0
4341	38541	0.0	42.9	7.0
4343	42055	0.0	42.9	7.0
4350	39241	0.0	42.9	7.0
4371	40647	0.0	42.9	7.0
4384	41355	0.0	42.9	7.0
4386	39261	0.0	42.9	7.0
4395	39967	0.0	42.9	7.0
4397	38559	0.0	42.9	7.0
4400	40663	0.0	42.9	7.0
4403	40669	0.0	42.9	7.0
4408	39263	0.0	42.9	7.0
4421	44930	0.0	37.5	8.0
4424	42071	0.0	42.9	7.0
4425	45638	0.0	37.5	8.0
4428	44228	0.0	37.5	8.0
4429	41371	0.0	42.9	7.0
4434	45640	0.0	50.0	8.0
4435	44163	0.0	37.5	8.0
4436	44171	0.0	37.5	8.0
4439	42818	0.0	50.0	8.0
4440	45634	0.0	50.0	8.0
4441	45644	0.0	50.0	8.0
4447	43471	0.0	37.5	8.0
4448	43536	0.0	62.5	8.0
4453	44944	0.0	37.5	8.0
4454	45646	0.0	37.5	8.0
4457	44238	0.0	37.5	8.0
4458	44936	0.0	50.0	8.0
4461	44161	0.0	37.5	8.0
4469	44938	0.0	50.0	8.0
4470	45636	0.0	50.0	8.0
4477	44804	0.0	37.5	8.0
4483	44100	0.0	50.0	8.0
4544	46230	0.0	37.5	8.0
4547	45532	0.0	37.5	8.0
4557	45526	0.0	50.0	8.0
4573	45536	0.0	37.5	8.0
4593	41535	0.0	42.9	7.0
4594	40123	0.0	57.1	7.0
4600	41525	0.0	42.9	7.0

Table 8

SEQ ID NO	SpotID	T/N Colon >2x	T/N Colon <halfx	T/N Colon Num Ratios
4611	40817	0.0	42.9	7.0
4620	40821	0.0	42.9	7.0
4629	41529	0.0	42.9	7.0
4632	40825	0.0	42.9	7.0
4645	41527	0.0	42.9	7.0
4696	41527	0.0	42.9	7.0
4718	40823	0.0	42.9	7.0
4727	38758	0.0	57.1	7.0
4729	42229	0.0	42.9	7.0
4743	38764	0.0	42.9	7.0
4754	42235	0.0	42.9	7.0
4768	42239	0.0	42.9	7.0
4835	39472	0.0	42.9	7.0
4922	40868	0.0	57.1	7.0
4938	40866	0.0	42.9	7.0
4950	41576	0.0	42.9	7.0
4978	40870	0.0	42.9	7.0
5065	39488	0.0	42.9	7.0
5117	40888	0.0	42.9	7.0
5140	40886	0.0	42.9	7.0
5150	40890	0.0	42.9	7.0
5165	41588	0.0	42.9	7.0
5186	41596	0.0	42.9	7.0
5228	42290	0.0	42.9	7.0
5252	43118	0.0	50.0	8.0
5300	43114	0.0	62.5	8.0
5341	45220	0.0	37.5	8.0
5360	44518	0.0	37.5	8.0
5539	43120	0.0	37.5	8.0
5559	43812	0.0	50.0	8.0
5596	43810	0.0	50.0	8.0
5643	45224	0.0	50.0	8.0
5649	45226	0.0	37.5	8.0
5665	45922	0.0	37.5	8.0
5671	43265	0.0	37.5	8.0
5701	42573	0.0	37.5	8.0
5724	45232	0.0	37.5	8.0
5752	41161	0.0	71.4	7.0
5763	41163	0.0	42.9	7.0
5812	44591	0.0	50.0	8.0
5815	43189	0.0	37.5	8.0
5817	45293	0.0	37.5	8.0
5818	42487	0.0	37.5	8.0

Table 8

SEQ ID NO	SpotID	T/N Colon >2x	T/N Colon <halfx	T/N Colon Num Ratios
5821	43191	0.0	37.5	8.0
5825	38917	0.0	42.9	7.0
5829	38913	0.0	42.9	7.0
5836	41875	0.0	42.9	7.0
5837	45987	0.0	37.5	8.0
5847	45289	0.0	37.5	8.0
5848	45989	0.0	50.0	8.0
5979	44537	0.0	50.0	8.0
80	44681	12.5	37.5	8.0
86	43981	12.5	50.0	8.0
78	44675	37.5	0.0	8.0
104	42428	37.5	0.0	8.0
3248	45866	37.5	0.0	8.0
1853	39216	42.9	0.0	7.0
2049	41657	42.9	0.0	7.0
5148	40188	42.9	0.0	7.0
16	44200	50.0	0.0	8.0
3619	43404	50.0	0.0	8.0
600	42108	57.1	0.0	7.0
4684	40125	57.1	0.0	7.0
1591	44634	62.5	0.0	8.0
1518	46399	71.4	0.0	7.0
1978	38827	71.4	0.0	7.0
17	44202	75.0	0.0	8.0
1975	41244	85.7	0.0	7.0
118	43970	87.5	0.0	8.0
114	43972	100.0	0.0	8.0

Table 13

CloneID	ES No	ClusterID	SequenceName
M00007960D:E09	ES 168	142842	1513.A14.gz43_300454
M00007963D:D03	ES 168	142614	1513.A15.gz43_300470
M00021925A:H07	ES 168	120049	1513.D19.gz43_300537
M00022072A:E12	ES 168	153316	1513.E14.gz43_300458
M00022135D:D06	ES 168	145815	1513.F09.gz43_300379
M00022255B:F12	ES 168	158321	1513.H09.gz43_300381
M00022445D:E12	ES 168	101499	1513.J13.gz43_300447
M00022537D:C05	ES 168	168195	1513.L10.gz43_300401
M00022622A:G01	ES 168	99011	1513.N16.gz43_300499
M00022648C:D08	ES 168	169458	1513.O03.gz43_300292
M00022710C:H03	ES 168	171073	1513.P18.gz43_300533
M00023406A:G03	ES 168	189993	1521.C14.gz43_303619
M00027018B:F01	ES 168	94539	1521.F23.gz43_303766
M00027100A:D12	ES 168	220463	1521.H05.gz43_303480
M00027103D:B05	ES 168	189073	1521.H06.gz43_303496
M00027123D:F02	ES 168	186594	1521.H13.gz43_303608
M00027126C:H05	ES 168	222818	1521.H14.gz43_303624
M00027219B:G12	ES 168	188309	1521.J06.gz43_303498
M00027287B:H10	ES 168	217042	1521.K08.gz43_303531
M00027514C:F01	ES 168	187525	1521.N10.gz43_303566
M00027517C:F08	ES 168	215366	1521.N12.gz43_303598
M00027586B:B03	ES 168	218904	1521.O13.gz43_303615
M00027587C:F02	ES 168	185056	1521.O16.gz43_303663
M00027694C:C11	ES 168	186404	1521.P20.gz43_303728
M00028061D:D10	ES 168	432159	2128.A24.gz43_277785
M00028359D:F09	ES 168	188377	2128.H15.gz43_277648
M00028627B:F12	ES 168	427799	2128.K06.gz43_277507
M00032476D:F07	ES 168	155615	2128.P17.gz43_277688
M00032477A:B02	ES 168	125604	2128.P18.gz43_277704
M00032685B:C10	ES 168	427571	2130.H13.gz43_278017
M00032686C:D10	ES 168	38494	2130.H16.gz43_278065
M00032686D:G09	ES 168	78607	2130.H18.gz43_278097
M00032695B:A01	ES 168	44615	2130.I20.gz43_278130
M00032703D:E10	ES 168	90192	2130.J18.gz43_278099
M00032732A:A03	ES 168	376753	2130.M21.gz43_278150
M00032736A:B06	ES 168	429735	2130.N02.gz43_277847
M00032738D:G11	ES 168	436888	2130.N09.gz43_277959
M00032745C:F03	ES 168	72838	2130.O05.gz43_277896
M00032766A:A10	ES 168	427907	2131.A01.gz43_307885
M00032779A:A04	ES 168	37875	2131.A19.gz43_308173
M00032780A:B09	ES 168	48238	2131.A23.gz43_308237
M00032783A:H08	ES 168	226324	2131.B04.gz43_307934
M00032786A:H04	ES 168	221686	2131.B14.gz43_308094
M00032809B:E10	ES 168	441801	2131.E06.gz43_307969

Table 13

CloneID	ES No	ClusterID	SequenceName
M00032811A:G10	ES 168	48238	2131.E12.gz43_308065
M00032857A:B02	ES 168	34071	2131.I13.gz43_308085
M00032858D:H11	ES 168	26926	2131.I19.gz43_308181
M00032859C:E04	ES 168	441874	2131.I21.gz43_308213
M00032865A:D11	ES 168	440284	2131.J16.gz43_308134
M00032872B:A02	ES 168	62016	2131.K11.gz43_308055
M00032886A:D04	ES 168	48238	2131.M02.gz43_307913
M00032914B:D09	ES 168	12481	2131.P18.gz43_308172
M00032915B:D01	ES 168	37805	2131.P19.gz43_308188
M00039047C:A05	ES 168	376044	2152.A18.gz43_278491
M00039052B:H03	ES 168	36453	2152.B14.gz43_278428
M00039069D:E12	ES 168	387530	2152.D12.gz43_278398
M00039109A:H09	ES 168	375655	2152.H10.gz43_278370
M00039121C:C06	ES 168	375415	2152.J18.gz43_278500
M00039183B:E03	ES 168	400617	2176.A09.gz43_281808
M00039184A:A08	ES 168	400047	2176.A13.gz43_281872
M00039184C:C05	ES 168	402411	2176.A16.gz43_281920
M00039214C:D12	ES 168	390563	2153.D08.gz43_278834
M00039222C:G06	ES 168	375706	2153.F03.gz43_278756
M00039240A:H08	ES 168	390017	2153.I08.gz43_278839
M00039241A:H11	ES 168	376384	2153.I11.gz43_278887
M00039244C:F10	ES 168	379046	2153.J06.gz43_278808
M00039251A:G12	ES 168	372952	2153.K14.gz43_278937
M00039274C:D12	ES 168	377596	2153.O08.gz43_278845
M00039330B:H09	ES 168	60037	2154.G05.gz43_279173
M00039336A:C07	ES 168	376044	2154.G21.gz43_279429
M00039346C:G08	ES 168	390968	2154.I18.gz43_279383
M00039363B:H10	ES 168	409330	2176.B02.gz43_281697
M00039366C:B10	ES 168	400171	2176.B12.gz43_281857
M00039366D:A02	ES 168	404736	2176.B13.gz43_281873
M00039369D:D11	ES 168	407195	2176.C02.gz43_281698
M00039371A:E01	ES 168	407443	2176.C07.gz43_281778
M00039373B:B09	ES 168	403671	2176.C12.gz43_281858
M00039375A:C09	ES 168	411124	2176.C17.gz43_281938
M00039379A:D03	ES 168	411985	2176.D02.gz43_281699
M00039404B:G11	ES 168	377696	2154.M04.gz43_279163
M00039440C:F09	ES 168	376255	2155.A24.gz43_279855
M00039451B:C06	ES 168	389425	2155.B19.gz43_279776
M00039451B:F01	ES 168	378420	2155.B21.gz43_279808
M00039457A:D07	ES 168	373973	2155.C12.gz43_279665
M00039479A:A10	ES 168	376439	2155.F16.gz43_279732
M00039479D:C06	ES 168	375510	2155.F21.gz43_279812
M00039499C:G09	ES 168	413767	2176.E09.gz43_281812
M00039502D:H03	ES 168	401675	2176.E19.gz43_281972



Table 13

CloneID	ES No	ClusterID	SequenceName
M00039503B:G05	ES 168	413621	2176.F01.gz43_281685
M00039503D:E08	ES 168	412621	2176.F02.gz43_281701
M00039504B:F05	ES 168	402941	2176.F06.gz43_281765
M00039505B:G07	ES 168	413627	2176.F13.gz43_281877
M00039507D:E03	ES 168	412483	2176.F24.gz43_282053
M00039508D:C03	ES 168	411113	2176.G03.gz43_281718
M00039514A:G03	ES 168	402392	2176.G24.gz43_282054
M00039514B:E07	ES 168	407711	2176.H02.gz43_281703
M00039516C:H06	ES 168	400633	2176.H09.gz43_281815
M00039521A:D02	ES 168	400454	2176.H20.gz43_281991
M00039521C:B01	ES 168	405932	2176.H22.gz43_282023
M00039523A:D09	ES 168	402411	2176.I04.gz43_281736
M00039525B:H03	ES 168	409612	2176.I14.gz43_281896
M00039527B:D06	ES 168	406855	2176.I19.gz43_281976
M00039530B:H07	ES 168	414355	2176.J04.gz43_281737
M00039534A:H04	ES 168	49950	2176.J13.gz43_281881
M00039534D:E07	ES 168	412416	2176.J17.gz43_281945
M00039536B:E10	ES 168	402147	2176.J20.gz43_281993
M00039536B:H03	ES 168	413997	2176.J21.gz43_282009
M00039537B:F06	ES 168	401510	2176.J24.gz43_282057
M00039562A:D10	ES 168	400428	2176.K08.gz43_281802
M00039562D:B02	ES 168	400233	2176.K10.gz43_281834
M00039562D:G01	ES 168	408986	2176.K11.gz43_281850
M00039563C:D01	ES 168	407260	2176.K13.gz43_281882
M00039564B:F08	ES 168	408306	2176.K18.gz43_281962
M00039564C:H05	ES 168	409589	2176.K21.gz43_282010
M00039565B:H09	ES 168	402287	2176.K24.gz43_282058
M00039566D:E08	ES 168	400628	2176.L06.gz43_281771
M00039568C:E05	ES 168	94771	2176.L11.gz43_281851
M00039583A:G09	ES 168	408649	2176.L24.gz43_282059
M00039586A:C03	ES 168	406499	2176.M13.gz43_281884
M00039586D:D05	ES 168	406734	2176.M17.gz43_281948
M00039588A:H12	ES 168	202308	2176.M20.gz43_281996
M00039588B:H02	ES 168	409262	2176.M21.gz43_282012
M00039588D:F10	ES 168	402049	2176.M22.gz43_282028
M00039592C:F09	ES 168	413346	2176.N07.gz43_281789
M00039592D:E01	ES 168	401005	2176.N09.gz43_281821
M00039594A:F09	ES 168	413133	2176.N14.gz43_281901
M00039599A:E08	ES 168	407964	2176.O07.gz43_281790
M00039605D:E02	ES 168	401426	2176.P01.gz43_281695
M00039606C:B07	ES 168	202308	2176.P07.gz43_281791
M00039607A:F05	ES 168	402147	2176.P09.gz43_281823
M00039610A:G11	ES 168	413915	2176.P23.gz43_282047
M00039619C:B01	ES 168	376994	2155.I16.gz43_279735

Table 13

CloneID	ES No	ClusterID	SequenceName
M00039632A:C01	ES 168	60037	2155.J03.gz43_279528
M00039664B:H10	ES 168	376839	2155.N05.gz43_279564
M00039665C:B01	ES 168	379805	2155.N15.gz43_279724
M00039674B:G11	ES 168	373680	2155.P11.gz43_279662
M00039675C:C05	ES 168	379879	2155.P22.gz43_279838
M00039679C:A02	ES 168	379279	2164.A24.gz43_280239
M00039681B:F05	ES 168	379046	2164.B15.gz43_280096
M00039698A:A06	ES 168	396785	2164.D18.gz43_280146
M00039730B:B07	ES 168	398028	2164.H18.gz43_280150
M00039734A:E06	ES 168	377772	2178.A12.gz43_282310
M00039752D:D07	ES 168	402070	2178.B16.gz43_282375
M00039753B:A11	ES 168	401748	2178.B17.gz43_282391
M00039760B:F12	ES 168	419751	2178.C15.gz43_282360
M00039760C:H07	ES 168	420504	2178.C18.gz43_282408
M00039774A:E11	ES 168	380025	2164.I10.gz43_280023
M00039778D:D05	ES 168	397167	2164.J03.gz43_279912
M00039820D:F08	ES 168	376074	2164.O24.gz43_280253
M00039823D:D09	ES 168	216179	2164.P10.gz43_280030
M00039871C:C01	ES 168	398061	2165.F09.gz43_280388
M00039883D:G06	ES 168	373905	2165.H01.gz43_280262
M00039885B:A10	ES 168	393635	2165.H06.gz43_280342
M00039893A:G12	ES 168	376808	2165.I10.gz43_280407
M00039905B:F09	ES 168	376773	2165.K01.gz43_280265
M00039977C:C05	ES 168	67549	2165.P01.gz43_280270
M00039978D:C04	ES 168	396969	2165.P07.gz43_280366
M00039986B:A11	ES 168	375655	2166.A06.gz43_281279
M00039988B:C08	ES 168	379879	2166.A11.gz43_281359
M00040001A:H02	ES 168	398831	2166.A23.gz43_281551
M00040070C:D11	ES 168	377696	2166.J11.gz43_281368
M00040076B:D01	ES 168	233814	2166.K07.gz43_281305
M00040096D:C03	ES 168	379879	2166.N07.gz43_281308
M00040113C:H09	ES 168	185432	2166.P24.gz43_281582
M00040134A:A07	ES 168	402411	2178.D07.gz43_282233
M00040141A:G10	ES 168	417259	2178.E04.gz43_282186
M00040145B:C12	ES 168	385980	2178.E21.gz43_282458
M00040160C:A04	ES 168	414821	2178.G05.gz43_282204
M00040161C:H06	ES 168	417426	2178.G11.gz43_282300
M00040161D:C03	ES 168	415527	2178.G12.gz43_282316
M00040171B:F01	ES 168	416819	2178.H19.gz43_282429
M00040171B:H03	ES 168	402353	2178.H20.gz43_282445
M00040181B:B06	ES 168	418340	2178.J12.gz43_282319
M00040181B:C05	ES 168	403837	2178.J13.gz43_282335
M00040183B:C06	ES 168	418682	2178.K02.gz43_282160
M00040183D:C08	ES 168	402534	2178.K05.gz43_282208

Table 13

CloneID	ES No	ClusterID	SequenceName
M00040188B:E05	ES 168	419255	2178.L07.gz43_282241
M00040189D:A06	ES 168	403154	2178.L12.gz43_282321
M00040190B:C02	ES 168	418482	2178.L14.gz43_282353
M00040196B:F10	ES 168	416914	2178.L20.gz43_282449
M00040197B:D05	ES 168	415950	2178.M03.gz43_282178
M00040222A:E06	ES 168	57183	2178.M22.gz43_282482
M00040222C:E06	ES 168	416370	2178.N03.gz43_282179
M00040223B:G05	ES 168	417240	2178.N07.gz43_282243
M00040227A:E07	ES 168	402070	2178.N16.gz43_282387
M00040230B:B01	ES 168	415058	2178.O07.gz43_282244
M00040233C:F09	ES 168	416762	2178.O21.gz43_282468
M00040235C:D02	ES 168	402049	2178.P04.gz43_282197
M00039747A:H06	ES 169	423884	2184.A03.gz43_282699
M00039748A:E12	ES 169	422788	2184.A05.gz43_282731
M00039749B:G05	ES 169	402298	2184.A08.gz43_282779
M00039750C:F08	ES 169	403306	2184.A17.gz43_282923
M00039762C:D11	ES 169	140224	2184.A22.gz43_283003
M00039770C:B08	ES 169	424793	2184.B21.gz43_282988
M00039947A:G06	ES 169	423202	2184.C17.gz43_282925
M00039950C:C05	ES 169	403306	2184.D01.gz43_282670
M00039958D:D05	ES 169	402049	2184.D16.gz43_282910
M00040210D:C09	ES 169	424996	2184.F12.gz43_282848
M00040248A:G09	ES 169	402941	2178.P19.gz43_282437
M00040294B:E09	ES 169	402298	2184.G24.gz43_283041
M00040297B:G04	ES 169	423214	2184.H17.gz43_282930
M00040318C:B09	ES 169	403111	2184.J04.gz43_282724
M00040319A:E03	ES 169	422542	2184.J07.gz43_282772
M00040319C:F08	ES 169	235376	2184.J10.gz43_282820
M00040319D:G10	ES 169	423534	2184.J11.gz43_282836
M00040320A:B06	ES 169	401748	2184.J12.gz43_282852
M00040322B:A08	ES 169	420958	2184.K02.gz43_282693
M00040323D:F04	ES 169	423008	2184.K13.gz43_282869
M00040328D:A03	ES 169	402298	2184.L01.gz43_282678
M00040330D:C12	ES 169	421826	2184.L10.gz43_282822
M00040338C:D05	ES 169	396509	2184.M14.gz43_282887
M00040347B:B11	ES 169	424723	2184.N13.gz43_282872
M00040363A:G07	ES 169	403837	2184.O04.gz43_282729
M00040364B:E11	ES 169	422590	2184.O07.gz43_282777
M00042341A:D08	ES 169	0	1561.A04.gz43_314441
M00042341A:H04	ES 169	0	1561.A06.gz43_314473
M00042341D:G11	ES 169	0	1561.A14.gz43_314601
M00042342A:B04	ES 169	0	1561.A15.gz43_314617
M00042342C:H03	ES 169	0	1561.A18.gz43_314665

Table 13

CloneID	ES No	ClusterID	SequenceName
M00042342D:D03	ES 169	0	1561.A20.gz43_314697
M00042343A:C05	ES 169	0	1561.A24.gz43_314761
M00042343B:D05	ES 169	0	1561.B04.gz43_314442
M00042343B:E06	ES 169	0	1561.B05.gz43_314458
M00042343B:F12	ES 169	0	1561.B06.gz43_314474
M00042343D:F08	ES 169	0	1561.B09.gz43_314522
M00042344B:F02	ES 169	0	1561.B17.gz43_314650
M00042344B:H12	ES 169	0	1561.B19.gz43_314682
M00042344D:F03	ES 169	0	1561.C01.gz43_314395
M00042345A:E04	ES 169	0	1561.C03.gz43_314427
M00042345B:A05	ES 169	0	1561.C05.gz43_314459
M00042345D:B01	ES 169	0	1561.C10.gz43_314539
M00042345D:D04	ES 169	0	1561.C12.gz43_314571
M00042521A:E10	ES 169	0	1561.C16.gz43_314635
M00042521C:F11	ES 169	0	1561.C19.gz43_314683
M00042521D:G09	ES 169	0	1561.C22.gz43_314731
M00042522A:A05	ES 169	0	1561.C24.gz43_314763
M00042522C:H10	ES 169	0	1561.D10.gz43_314540
M00042522D:A08	ES 169	0	1561.D11.gz43_314556
M00042523B:H01	ES 169	0	1561.D20.gz43_314700
M00042523C:E08	ES 169	0	1561.D23.gz43_314748
M00042523C:H04	ES 169	0	1561.E02.gz43_314413
M00042523C:H06	ES 169	0	1561.E03.gz43_314429
M00042524C:C12	ES 169	0	1561.E15.gz43_314621
M00042524D:A10	ES 169	0	1561.E17.gz43_314653
M00042524D:D06	ES 169	0	1561.E19.gz43_314685
M00042525C:H07	ES 169	0	1561.F12.gz43_314574
M00042525D:E01	ES 169	0	1561.F15.gz43_314622
M00042526A:E10	ES 169	0	1561.F17.gz43_314654
M00042526A:F11	ES 169	0	1561.F19.gz43_314686
M00042526B:C12	ES 169	0	1561.F20.gz43_314702
M00042526C:B12	ES 169	0	1561.F23.gz43_314750
M00042526D:A02	ES 169	0	1561.F24.gz43_314766
M00042526D:A05	ES 169	0	1561.G01.gz43_314399
M00042526D:A07	ES 169	0	1561.G02.gz43_314415
M00042526D:D04	ES 169	0	1561.G04.gz43_314447
M00042527B:B01	ES 169	0	1561.G11.gz43_314559
M00042527C:A10	ES 169	0	1561.G14.gz43_314607
M00042527C:F01	ES 169	0	1561.G15.gz43_314623
M00042527D:E05	ES 169	0	1561.G20.gz43_314703
M00042527D:F12	ES 169	0	1561.G23.gz43_314751
M00042528C:G06	ES 169	0	1561.H07.gz43_314496
M00042528D:D09	ES 169	0	1561.H09.gz43_314528
M00042528D:H03	ES 169	0	1561.H10.gz43_314544

Table 13

CloneID	ES No	ClusterID	SequenceName
M00042529A:B12	ES 169	0	1561.H13.gz43_314592
M00042529A:G07	ES 169	0	1561.H15.gz43_314624
M00042529B:E03	ES 169	0	1561.H19.gz43_314688
M00042529D:D07	ES 169	0	1561.I02.gz43_314417
M00042530C:H02	ES 169	0	1561.I11.gz43_314561
M00042530D:A02	ES 169	0	1561.I12.gz43_314577
M00042530D:F09	ES 169	0	1561.I14.gz43_314609
M00042530D:H12	ES 169	0	1561.I17.gz43_314657
M00042531B:D12	ES 169	0	1561.I22.gz43_314737
M00042531B:G12	ES 169	0	1561.J01.gz43_314402
M00042531D:G08	ES 169	0	1561.J05.gz43_314466
M00042532A:D08	ES 169	0	1561.J09.gz43_314530
M00042532A:H03	ES 169	0	1561.J14.gz43_314610
M00042533B:F11	ES 169	0	1561.K02.gz43_314419
M00042533C:F04	ES 169	0	1561.K05.gz43_314467
M00042533D:B05	ES 169	0	1561.K06.gz43_314483
M00042534A:G10	ES 169	0	1561.K14.gz43_314611
M00042534B:B08	ES 169	0	1561.K16.gz43_314643
M00042534B:D06	ES 169	0	1561.K17.gz43_314659
M00042534C:A09	ES 169	0	1561.K19.gz43_314691
M00042534C:G04	ES 169	0	1561.K20.gz43_314707
M00042534D:D10	ES 169	0	1561.K23.gz43_314755
M00042535B:E04	ES 169	0	1561.L03.gz43_314436
M00042536B:G08	ES 169	0	1561.L15.gz43_314628
M00042536C:A06	ES 169	0	1561.L16.gz43_314644
M00042536C:B03	ES 169	0	1561.L18.gz43_314676
M00042537A:A07	ES 169	0	1561.L22.gz43_314740
M00042537A:D12	ES 169	0	1561.M01.gz43_314405
M00042537A:G09	ES 169	0	1561.M04.gz43_314453
M00042537A:H04	ES 169	0	1561.M05.gz43_314469
M00042537B:A07	ES 169	0	1561.M06.gz43_314485
M00042537B:B05	ES 169	0	1561.M07.gz43_314501
M00042537C:D04	ES 169	0	1561.M10.gz43_314549
M00042539B:D09	ES 169	0	1561.N06.gz43_314486
M00042539C:A04	ES 169	0	1561.N07.gz43_314502
M00042539C:E05	ES 169	0	1561.N08.gz43_314518
M00042539C:H08	ES 169	0	1561.N09.gz43_314534
M00042539D:A04	ES 169	0	1561.N10.gz43_314550
M00042540A:D11	ES 169	0	1561.N13.gz43_314598
M00042540A:G11	ES 169	0	1561.N14.gz43_314614
M00042540B:B03	ES 169	0	1561.N16.gz43_314646
M00042540C:A12	ES 169	0	1561.N17.gz43_314662
M00042540D:F12	ES 169	0	1561.N23.gz43_314758
M00042540D:H02	ES 169	0	1561.N24.gz43_314774

Table 13

CloneID	ES No	ClusterID	SequenceName
M00042541A:B07	ES 169	0	1561.O04.gz43_314455
M00042541A:E06	ES 169	0	1561.O06.gz43_314487
M00042541A:G02	ES 169	0	1561.O07.gz43_314503
M00042541B:B05	ES 169	0	1561.O09.gz43_314535
M00042542A:C11	ES 169	0	1561.O18.gz43_314679
M00042542B:B01	ES 169	0	1561.O21.gz43_314727
M00042542B:C11	ES 169	0	1561.O23.gz43_314759
M00042542B:E04	ES 169	0	1561.O24.gz43_314775
M00042543B:H12	ES 169	0	1561.P18.gz43_314680
M00042543C:F06	ES 169	0	1561.P21.gz43_314728
M00042546A:D03	ES 169	446572	1562.B01.gz43_207804
M00042546D:E06	ES 169	446389	1562.B13.gz43_207996
M00042547B:D11	ES 169	446531	1562.B22.gz43_208140
M00042548B:A01	ES 169	456845	1562.C12.gz43_207981
M00042548B:G01	ES 169	462149	1562.C14.gz43_208013
M00042550A:D12	ES 169	446674	1562.D12.gz43_207982
M00042550C:H10	ES 169	446981	1562.D18.gz43_208078
M00042552C:D02	ES 169	466280	1562.E22.gz43_208143
M00042552D:A11	ES 169	464091	1562.F01.gz43_207808
M00042554A:C02	ES 169	451780	1562.F04.gz43_207856
M00042554C:E02	ES 169	467262	1562.F08.gz43_207920
M00042554C:F09	ES 169	447597	1562.F10.gz43_207952
M00042554D:C08	ES 169	465594	1562.F12.gz43_207984
M00042555A:A04	ES 169	464067	1562.F17.gz43_208064
M00042555A:A10	ES 169	447152	1562.F18.gz43_208080
M00042555B:B07	ES 169	464905	1562.F20.gz43_208112
M00042555D:G10	ES 169	469511	1562.G05.gz43_207873
M00042556A:G12	ES 169	451737	1562.G10.gz43_207953
M00042556B:D12	ES 169	466719	1562.G12.gz43_207985
M00042556B:E10	ES 169	447174	1562.G14.gz43_208017
M00042557A:D09	ES 169	455075	1562.H05.gz43_207874
M00042557D:H12	ES 169	469837	1562.H17.gz43_208066
M00042558A:D03	ES 169	447517	1562.H18.gz43_208082
M00042558A:F11	ES 169	468330	1562.H20.gz43_208114
M00042558D:B07	ES 169	447308	1562.I03.gz43_207843
M00042560B:A01	ES 169	408386	1562.J01.gz43_207812
M00042560B:G10	ES 169	456462	1562.J04.gz43_207860
M00042561B:E12	ES 169	446620	1562.J21.gz43_208132
M00042561C:E12	ES 169	446621	1562.J24.gz43_208180
M00042562C:A07	ES 169	457405	1562.K14.gz43_208021
M00042563A:F10	ES 169	446829	1562.L02.gz43_207830
M00042563C:D08	ES 169	459536	1562.L09.gz43_207942
M00042563C:E02	ES 169	446614	1562.L10.gz43_207958
M00042563D:D02	ES 169	459523	1562.L11.gz43_207974

Table 13

CloneID	ES No	ClusterID	SequenceName
M00042563D:D09	ES 169	446495	1562.L12.gz43_207990
M00042564A:F01	ES 169	461559	1562.L19.gz43_208102
M00042564B:D11	ES 169	446495	1562.L22.gz43_208150
M00042564D:F10	ES 169	456471	1562.M06.gz43_207895
M00042565A:G05	ES 169	432159	1562.M10.gz43_207959
M00042565A:H03	ES 169	463487	1562.M12.gz43_207991
M00042567C:E02	ES 169	446703	1562.N16.gz43_208056
M00042567C:E07	ES 169	460972	1562.N18.gz43_208088
M00042567D:B08	ES 169	457783	1562.N21.gz43_208136
M00042567D:E12	ES 169	460493	1562.N24.gz43_208184
M00042568C:E03	ES 169	446657	1562.O14.gz43_208025
M00042568C:E08	ES 169	460766	1562.O15.gz43_208041
M00042569B:G07	ES 169	43338	1562.P03.gz43_207850
M00042569C:B05	ES 169	447346	1562.P05.gz43_207882
M00042569D:D02	ES 169	460190	1562.P09.gz43_207946
M00042570A:E08	ES 169	460516	1562.P11.gz43_207978
M00042570B:F11	ES 169	417078	1562.P18.gz43_208090
M00042570C:B12	ES 169	457842	1562.P21.gz43_208138
M00042571C:F03	ES 169	468783	1563.A14.gz43_208395
M00042571D:D06	ES 169	467057	1563.A15.gz43_208411
M00042572B:C07	ES 169	446302	1563.A19.gz43_208475
M00042572B:E05	ES 169	460789	1563.A20.gz43_208491
M00042573A:D05	ES 169	466971	1563.B05.gz43_208252
M00042573C:D05	ES 169	456052	1563.B14.gz43_208396
M00042573D:A10	ES 169	463896	1563.B21.gz43_208508
M00042574A:F05	ES 169	446409	1563.B23.gz43_208540
M00042574B:A07	ES 169	456925	1563.B24.gz43_208556
M00042574C:A04	ES 169	456920	1563.C04.gz43_208237
M00042575A:E01	ES 170	467327	1563.C14.gz43_208397
M00042575A:E02	ES 170	451383	1563.C15.gz43_208413
M00042575B:F02	ES 170	451382	1563.C20.gz43_208493
M00042575D:A11	ES 170	464275	1563.D01.gz43_208190
M00042575D:C05	ES 170	447417	1563.D03.gz43_208222
M00042576B:D11	ES 170	459961	1563.D12.gz43_208366
M00042576D:A08	ES 170	446213	1563.D17.gz43_208446
M00042576D:F01	ES 170	446839	1563.D21.gz43_208510
M00042577A:A11	ES 170	464547	1563.D23.gz43_208542
M00042577B:D05	ES 170	467051	1563.E06.gz43_208271
M00042578A:E08	ES 170	447597	1563.E14.gz43_208399
M00042579A:B05	ES 170	446933	1563.E22.gz43_208527
M00042579B:E05	ES 170	467644	1563.F01.gz43_208192
M00042580C:A03	ES 170	463951	1563.F13.gz43_208384
M00042691A:D08	ES 170	460244	1563.F19.gz43_208480

Table 13

CloneID	ES No	ClusterID	SequenceName
M00042691A:G04	ES 170	462767	1563.F21.gz43_208512
M00042691C:A05	ES 170	456985	1563.G04.gz43_208241
M00042691D:B03	ES 170	457890	1563.G08.gz43_208305
M00042691D:F03	ES 170	446776	1563.G12.gz43_208369
M00042692A:E11	ES 170	467293	1563.G16.gz43_208433
M00042692B:F04	ES 170	44503	1563.G22.gz43_208529
M00042693B:D03	ES 170	446549	1563.H09.gz43_208322
M00042694B:G05	ES 170	446962	1563.H18.gz43_208466
M00042694C:F01	ES 170	462008	1563.H23.gz43_208546
M00042695C:F05	ES 170	461734	1563.I09.gz43_208323
M00042695D:E11	ES 170	460884	1563.I12.gz43_208371
M00042695D:H01	ES 170	463368	1563.I14.gz43_208403
M00042697B:F06	ES 170	451454	1563.J01.gz43_208196
M00042697D:A03	ES 170	447190	1563.J03.gz43_208228
M00042698A:A01	ES 170	142559	1563.J05.gz43_208260
M00042699C:H06	ES 170	453605	1563.K08.gz43_208309
M00042700B:C12	ES 170	138049	1563.K12.gz43_208373
M00042700C:F11	ES 170	468109	1563.K20.gz43_208501
M00042700D:G08	ES 170	468979	1563.K24.gz43_208565
M00042702B:B07	ES 170	447326	1563.L20.gz43_208502
M00042702B:G07	ES 170	447826	1563.L22.gz43_208534
M00042702D:H01	ES 170	469944	1563.M02.gz43_208215
M00042704A:C02	ES 170	447433	1563.M18.gz43_208471
M00042705A:B07	ES 170	465339	1563.N08.gz43_208312
M00042706C:D02	ES 170	51939	1563.O02.gz43_208217
M00042707B:G05	ES 170	450929	1563.O14.gz43_208409
M00042707C:A09	ES 170	446922	1563.O16.gz43_208441
M00042709B:G05	ES 170	468930	1564.A01.gz43_296552
M00042709C:B05	ES 170	464937	1564.A02.gz43_296568
M00042710A:G10	ES 170	462393	1564.A08.gz43_296664
M00042710B:B09	ES 170	457975	1564.A09.gz43_296680
M00042711A:F01	ES 170	389425	1564.A20.gz43_296856
M00042711B:H04	ES 170	463143	1564.B01.gz43_296553
M00042711C:H10	ES 170	447006	1564.B06.gz43_296633
M00042711D:A03	ES 170	446191	1564.B07.gz43_296649
M00042711D:G04	ES 170	462604	1564.B09.gz43_296681
M00042712A:E08	ES 170	467780	1564.B12.gz43_296729
M00042712B:C04	ES 170	447429	1564.B16.gz43_296793
M00042712C:E06	ES 170	447649	1564.B19.gz43_296841
M00042713B:C08	ES 170	465785	1564.C01.gz43_296554
M00042713B:F03	ES 170	447189	1564.C03.gz43_296586
M00042713C:A09	ES 170	446230	1564.C04.gz43_296602
M00042713C:B08	ES 170	447268	1564.C05.gz43_296618
M00042713D:C06	ES 170	465782	1564.C07.gz43_296650



Table 13

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M00042714A:G04	ES 170	456530	1564.C11.gz43_296714
M00042714A:H05	ES 170	447561	1564.C12.gz43_296730
M00042714B:C07	ES 170	447430	1564.C13.gz43_296746
M00042714B:E01	ES 170	447826	1564.C15.gz43_296778
M00042714C:C10	ES 170	465528	1564.C19.gz43_296842
M00042714C:F12	ES 170	449171	1564.C21.gz43_296874
M00042714D:E11	ES 170	452504	1564.C24.gz43_296922
M00042715D:A10	ES 170	457644	1564.D13.gz43_296747
M00042715D:E02	ES 170	446741	1564.D15.gz43_296779
M00042716A:F09	ES 170	446866	1564.D22.gz43_296891
M00042716D:G04	ES 170	462337	1564.E11.gz43_296716
M00042717B:G11	ES 170	462865	1564.E19.gz43_296844
M00042719A:H06	ES 170	452687	1564.F15.gz43_296781
M00042719C:H05	ES 170	405932	1564.F19.gz43_296845
M00042720C:E03	ES 170	461135	1564.G07.gz43_296654
M00042721A:G07	ES 170	446964	1564.G13.gz43_296750
M00042721B:A04	ES 170	446230	1564.G14.gz43_296766
M00042721D:B03	ES 170	457922	1564.G19.gz43_296846
M00042721D:D01	ES 170	450723	1564.G21.gz43_296878
M00042722A:G08	ES 170	462348	1564.H03.gz43_296591
M00042722B:D06	ES 170	460051	1564.H05.gz43_296623
M00042722D:C12	ES 170	459158	1564.H13.gz43_296751
M00042723A:D09	ES 170	446601	1564.H15.gz43_296783
M00042724A:G02	ES 170	453766	1564.I01.gz43_296560
M00042724D:B04	ES 170	446345	1564.I09.gz43_296688
M00042724D:H04	ES 170	447048	1564.I13.gz43_296752
M00042726B:E01	ES 170	446732	1564.I20.gz43_296864
M00042726D:G11	ES 170	462398	1564.J01.gz43_296561
M00042729A:F11	ES 170	461316	1564.K05.gz43_296626
M00042729A:H08	ES 170	462986	1564.K08.gz43_296674
M00042729B:F10	ES 170	461313	1564.K12.gz43_296738
M00042730D:D01	ES 170	424996	1564.L05.gz43_296627
M00042732A:A11	ES 170	453679	1564.L12.gz43_296739
M00042733C:C05	ES 170	454825	1564.M08.gz43_296676
M00042733D:G08	ES 170	450723	1564.M13.gz43_296756
M00042735A:G07	ES 170	469754	1564.M20.gz43_296868
M00042735A:G12	ES 170	469766	1564.M21.gz43_296884
M00042735B:A06	ES 170	403949	1564.M23.gz43_296916
M00042735C:G02	ES 170	420686	1564.N05.gz43_296629
M00042735D:A07	ES 170	463824	1564.N06.gz43_296645
M00042736A:F03	ES 170	447387	1564.N11.gz43_296725
M00042736B:G09	ES 170	447813	1564.N14.gz43_296773
M00042737A:A07	ES 170	463821	1564.N19.gz43_296853
M00042737B:C07	ES 170	390563	1564.O01.gz43_296566

Table 13

CloneID	ES No	ClusterID	SequenceName
M00042737B:E02	ES 170	467189	1564.O02.gz43_296582
M00042737C:C07	ES 170	446740	1564.O04.gz43_296614
M00042737C:E03	ES 170	447579	1564.O05.gz43_296630
M00042737D:D03	ES 170	466614	1564.O08.gz43_296678
M00042738D:H12	ES 170	463217	1564.O19.gz43_296854
M00042739A:C06	ES 170	446242	1564.O20.gz43_296870
M00042739A:D02	ES 170	460078	1564.O21.gz43_296886
M00042739A:G07	ES 170	446922	1564.O23.gz43_296918
M00042739B:F06	ES 170	453762	1564.P02.gz43_296583
M00042740A:A01	ES 170	457656	1564.P09.gz43_296695
M00042742B:H03	ES 170	450940	1573.A06.gz43_208651
M00042744A:D11	ES 170	466894	1573.B07.gz43_208668
M00042745B:B06	ES 170	464622	1573.C01.gz43_208573
M00042745C:E11	ES 170	452399	1573.C05.gz43_208637
M00042745D:H04	ES 170	452093	1573.C08.gz43_208685
M00042747A:G12	ES 170	469150	1573.C22.gz43_208909
M00042747D:B01	ES 170	447293	1573.D01.gz43_208574
M00042747D:C08	ES 170	447421	1573.D02.gz43_208590
M00042748D:D08	ES 170	466920	1573.D10.gz43_208718
M00042750D:E07	ES 170	447645	1573.E04.gz43_208623
M00042881C:C11	ES 170	639372	1573.E15.gz43_208799
M00042882C:F06	ES 170	642146	1573.F10.gz43_208720
M00042882C:G07	ES 170	467293	1573.F12.gz43_208752
M00042882D:C04	ES 170	645690	1573.F15.gz43_208800
M00042883A:F06	ES 170	639849	1573.F18.gz43_208848
M00042884D:E03	ES 170	648467	1573.G17.gz43_208833
M00042885A:G09	ES 170	463060	1573.G21.gz43_208897
M00042886A:H03	ES 170	650364	1573.H04.gz43_208626
M00042886C:F01	ES 170	650195	1573.H11.gz43_208738
M00042886D:E10	ES 170	645470	1573.H16.gz43_208818
M00042887D:A11	ES 170	455996	1573.H21.gz43_208898
M00042888A:F02	ES 170	650231	1573.I03.gz43_208611
M00042889D:A01	ES 170	447161	1573.J08.gz43_208692
M00042889D:A12	ES 170	464205	1573.J10.gz43_208724
M00042890C:G11	ES 170	497434	1573.K01.gz43_208581
M00042890D:D03	ES 170	556711	1573.K03.gz43_208613
M00042890D:G05	ES 170	401426	1573.K06.gz43_208661
M00042891C:H01	ES 170	486238	1573.K19.gz43_208869
M00042892C:E03	ES 170	557974	1573.L09.gz43_208710
M00042892D:C04	ES 170	641890	1573.L10.gz43_208726
M00042892D:E06	ES 170	650852	1573.L13.gz43_208774
M00042892D:H04	ES 170	452506	1573.L14.gz43_208790
M00042894B:E05	ES 170	633946	1573.M08.gz43_208695
M00042894D:G05	ES 170	651029	1573.M17.gz43_208839

Table 13

CloneID	ES No	ClusterID	SequenceName
M00042895C:C10	ES 170	453908	1573.N01.gz43_208584
M00042896A:D04	ES 170	650756	1573.N12.gz43_208760
M00042896A:E03	ES 170	452611	1573.N13.gz43_208776
M00042896A:F09	ES 170	650944	1573.N14.gz43_208792
M00042898A:H05	ES 170	447141	1573.P02.gz43_208602
M00042900B:B10	ES 170	465104	1574.A03.gz43_208987
M00042900C:H11	ES 170	470593	1574.A04.gz43_209003
M00042901A:F12	ES 170	447750	1574.A11.gz43_209115
M00042901A:H11	ES 170	389591	1574.A14.gz43_209163
M00042902B:G02	ES 170	469608	1574.B04.gz43_209004
M00042902B:H01	ES 170	470462	1574.B05.gz43_209020
M00042902C:E11	ES 170	447660	1574.B07.gz43_209052
M00042903A:E04	ES 170	467710	1574.B12.gz43_209132
M00042903B:C09	ES 170	465984	1574.B15.gz43_209180
M00042904A:B01	ES 170	447212	1574.B24.gz43_209324
M00042904A:H10	ES 170	470641	1574.C03.gz43_208989
M00042905A:A07	ES 170	447147	1574.C07.gz43_209053
M00042905B:G03	ES 170	60260	1574.C11.gz43_209117
M00042905C:G08	ES 170	447815	1574.C14.gz43_209165
M00042906A:A12	ES 170	447218	1574.C17.gz43_209213
M00042906C:A10	ES 170	451624	1574.D04.gz43_209006
M00042907A:B11	ES 170	95617	1574.D14.gz43_209166
M00042907A:F03	ES 170	447692	1574.D15.gz43_209182
M00042907D:A11	ES 170	447173	1574.E02.gz43_208975
M00042908A:B01	ES 170	642691	1574.E06.gz43_209039
M00042908B:A11	ES 170	641069	1574.E12.gz43_209135
M00042908C:A03	ES 170	649744	1574.E18.gz43_209231
M00042908C:D12	ES 170	714629	1574.E20.gz43_209263
M00042908D:G12	ES 170	647086	1574.E24.gz43_209327
M00042909B:C04	ES 170	647639	1574.F07.gz43_209056
M00042909B:H08	ES 170	650398	1574.F12.gz43_209136
M00042909C:F10	ES 170	650235	1574.F17.gz43_209216
M00042909D:B11	ES 170	650564	1574.F18.gz43_209232
M00042910C:D03	ES 170	480508	1574.G04.gz43_209009
M00042910D:A02	ES 170	466697	1574.G06.gz43_209041
M00042910D:E11	ES 170	649965	1574.G08.gz43_209073
M00042911A:A02	ES 170	649810	1574.G11.gz43_209121
M00042911A:B02	ES 170	649900	1574.G12.gz43_209137
M00042911A:D04	ES 170	641029	1574.G15.gz43_209185
M00042911A:H12	ES 170	527355	1574.G18.gz43_209233
M00042911B:F10	ES 170	648855	1574.G21.gz43_209281
M00042911B:H08	ES 170	644376	1574.G23.gz43_209313
M00042911C:D01	ES 170	562247	1574.G24.gz43_209329
M00042912A:C01	ES 170	649965	1574.H06.gz43_209042

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CloneID	ES No	ClusterID	SequenceName
M00042912B:F11	ES 171	645924	1574.H11.gz43_209122
M00042912D:H08	ES 171	645954	1574.H16.gz43_209202
M00042912D:H10	ES 171	640356	1574.H17.gz43_209218
M00042913A:D09	ES 171	452989	1574.H18.gz43_209234
M00042913B:E10	ES 171	639740	1574.H22.gz43_209298
M00042914A:B05	ES 171	639371	1574.I09.gz43_209091
M00042914A:H10	ES 171	650423	1574.I16.gz43_209203
M00042914B:H03	ES 171	467364	1574.I20.gz43_209267
M00042914D:B10	ES 171	649852	1574.I22.gz43_209299
M00042915A:E06	ES 171	482043	1574.J05.gz43_209028
M00042915A:G10	ES 171	651051	1574.J06.gz43_209044
M00042915C:E05	ES 171	639923	1574.J12.gz43_209140
M00042915D:A11	ES 171	650527	1574.J15.gz43_209188
M00042915D:D06	ES 171	642151	1574.J17.gz43_209220
M00042915D:E03	ES 171	643940	1574.J18.gz43_209236
M00054791A:G04	ES 171	646404	1574.J21.gz43_209284
M00054791B:C09	ES 171	446974	1574.J24.gz43_209332
M00054792B:A03	ES 171	648159	1574.K18.gz43_209237
M00054793C:C01	ES 171	538237	1574.L07.gz43_209062
M00054793C:D11	ES 171	413767	1574.L11.gz43_209126
M00054793D:H11	ES 171	640306	1574.L13.gz43_209158
M00054794B:F09	ES 171	284269	1574.L23.gz43_209318
M00054794C:G11	ES 171	450506	1574.M06.gz43_209047
M00054794D:D02	ES 171	474298	1574.M09.gz43_209095
M00054794D:D08	ES 171	646568	1574.M10.gz43_209111
M00054795A:A08	ES 171	640181	1574.M16.gz43_209207
M00054796B:A01	ES 171	639391	1574.N04.gz43_209016
M00054796B:C08	ES 171	641525	1574.N05.gz43_209032
M00054797C:F03	ES 171	644789	1574.N20.gz43_209272
M00054797D:F01	ES 171	472101	1574.O01.gz43_208969
M00054798B:A01	ES 171	453572	1574.O06.gz43_209049
M00054798D:A12	ES 171	641315	1574.O15.gz43_209193
M00054798D:F01	ES 171	650773	1574.O17.gz43_209225
M00054799C:G11	ES 171	641875	1574.P02.gz43_208986
M00054799D:H02	ES 171	645223	1574.P05.gz43_209034
M00054800B:C06	ES 171	639787	1574.P10.gz43_209114
M00054800B:C11	ES 171	513262	1574.P12.gz43_209146
M00054800B:E08	ES 171	474298	1574.P15.gz43_209194
M00054800D:D08	ES 171	639901	1574.P23.gz43_209322
M00054800D:F08	ES 171	513248	1575.A01.gz43_209339
M00054911A:C08	ES 171	549699	1575.A05.gz43_209403
M00054911A:G01	ES 171	559776	1575.A10.gz43_209483
M00054911A:H06	ES 171	528616	1575.A13.gz43_209531

Table 13

CloneID	ES No	ClusterID	SequenceName
M00054911B:E10	ES 171	639992	1575.A15.gz43_209563
M00054911D:D03	ES 171	41878	1575.B02.gz43_209356
M00054912A:H08	ES 171	646949	1575.B05.gz43_209404
M00054912B:C05	ES 171	589098	1575.B08.gz43_209452
M00054912C:C01	ES 171	641057	1575.B13.gz43_209532
M00054912D:F11	ES 171	182437	1575.B19.gz43_209628
M00054912D:G01	ES 171	417130	1575.B20.gz43_209644
M00054912D:G04	ES 171	640230	1575.B21.gz43_209660
M00054913A:B12	ES 171	377855	1575.B24.gz43_209708
M00054913C:G03	ES 171	451811	1575.C12.gz43_209517
M00054914C:D12	ES 171	447246	1575.D04.gz43_209390
M00054914D:G07	ES 171	467381	1575.D09.gz43_209470
M00054915A:G03	ES 171	413767	1575.D13.gz43_209534
M00054915D:B08	ES 171	452220	1575.D21.gz43_209662
M00054915D:D05	ES 171	646293	1575.D22.gz43_209678
M00054915D:E07	ES 171	468109	1575.D24.gz43_209710
M00054916A:A05	ES 171	649872	1575.E02.gz43_209359
M00054916A:E05	ES 171	639256	1575.E05.gz43_209407
M00054916A:F10	ES 171	639394	1575.E06.gz43_209423
M00054916B:E02	ES 171	648664	1575.E11.gz43_209503
M00054916C:C04	ES 171	545980	1575.E13.gz43_209535
M00054917A:F07	ES 171	473854	1575.E22.gz43_209679
M00054917B:A05	ES 171	648609	1575.E23.gz43_209695
M00054917B:F01	ES 171	649082	1575.F03.gz43_209376
M00054917C:D03	ES 171	643843	1575.F08.gz43_209456
M00054917C:F03	ES 171	648532	1575.F10.gz43_209488
M00054917D:A03	ES 171	647991	1575.F14.gz43_209552
M00054917D:A12	ES 171	644692	1575.F16.gz43_209584
M00054917D:D12	ES 171	639662	1575.F18.gz43_209616
M00054917D:E05	ES 171	639255	1575.F19.gz43_209632
M00054917D:H02	ES 171	648532	1575.F23.gz43_209696
M00054918A:D02	ES 171	649506	1575.G02.gz43_209361
M00054918A:F09	ES 171	553100	1575.G04.gz43_209393
M00054918B:H01	ES 171	449861	1575.G10.gz43_209489
M00054918B:H08	ES 171	645252	1575.G11.gz43_209505
M00054918D:C03	ES 171	456923	1575.G15.gz43_209569
M00054918D:C11	ES 171	452204	1575.G16.gz43_209585
M00054918D:G02	ES 171	645252	1575.G18.gz43_209617
M00054918D:H09	ES 171	468222	1575.G19.gz43_209633
M00054919A:H04	ES 171	452845	1575.G24.gz43_209713
M00054919C:F06	ES 171	644556	1575.H05.gz43_209410
M00054919D:H12	ES 171	642084	1575.H14.gz43_209554
M00054920A:A05	ES 171	61616	1575.H16.gz43_209586
M00054920A:B07	ES 171	554010	1575.H18.gz43_209618

Table 13

CloneID	ES No	ClusterID	SequenceName
M00054920A:C11	ES 171	564440	1575.H22.gz43_209682
M00054920B:C04	ES 171	649933	1575.I03.gz43_209379
M00054920B:C12	ES 171	500337	1575.I05.gz43_209411
M00054920C:A06	ES 171	643843	1575.I10.gz43_209491
M00054920C:D05	ES 171	452707	1575.I12.gz43_209523
M00054920C:F02	ES 171	649555	1575.I15.gz43_209571
M00055426B:B02	ES 171	452986	1575.J06.gz43_209428
M00055426C:B12	ES 171	447574	1575.J14.gz43_209556
M00055426C:C10	ES 171	649746	1575.J15.gz43_209572
M00055426D:F03	ES 171	639144	1575.J21.gz43_209668
M00055427A:F01	ES 171	643924	1575.K05.gz43_209413
M00055427A:F02	ES 171	654723	1575.K06.gz43_209429
M00055427B:E01	ES 171	41141	1575.K10.gz43_209493
M00055427B:F06	ES 171	640814	1575.K11.gz43_209509
M00055427C:A06	ES 171	504568	1575.K13.gz43_209541
M00055427C:E12	ES 171	630269	1575.K17.gz43_209605
M00055427C:F07	ES 171	650487	1575.K18.gz43_209621
M00055427C:H11	ES 171	468783	1575.K19.gz43_209637
M00055427D:E05	ES 171	456420	1575.K21.gz43_209669
M00055428A:C02	ES 171	643279	1575.L01.gz43_209350
M00055428B:H02	ES 171	645347	1575.L05.gz43_209414
M00055428C:G06	ES 171	243722	1575.L12.gz43_209526
M00055428D:G12	ES 171	611927	1575.L18.gz43_209622
M00055429A:H04	ES 171	639520	1575.L22.gz43_209686
M00055429B:B12	ES 171	467989	1575.M01.gz43_209351
M00055429B:E12	ES 171	446254	1575.M02.gz43_209367
M00055429B:G04	ES 171	639444	1575.M03.gz43_209383
M00055429B:H02	ES 171	447254	1575.M04.gz43_209399
M00055429D:G07	ES 171	584071	1575.M11.gz43_209511
M00055430B:E08	ES 171	495143	1575.M16.gz43_209591
M00055430B:H02	ES 171	560700	1575.M19.gz43_209639
M00055430C:G11	ES 171	452293	1575.M23.gz43_209703
M00055430D:F04	ES 171	650184	1575.N01.gz43_209352
M00055431A:E01	ES 171	451994	1575.N05.gz43_209416
M00055431A:H05	ES 171	645344	1575.N07.gz43_209448
M00055431B:A01	ES 171	570812	1575.N09.gz43_209480
M00055431C:H08	ES 171	639523	1575.N15.gz43_209576
M00055432A:A03	ES 171	446495	1575.N19.gz43_209640
M00055432A:D05	ES 171	639150	1575.N21.gz43_209672
M00055432B:B04	ES 171	642073	1575.N23.gz43_209704
M00055432B:H02	ES 171	641542	1575.O02.gz43_209369
M00055432C:D12	ES 171	447913	1575.O05.gz43_209417
M00055432C:F01	ES 171	645162	1575.O07.gz43_209449
M00055432D:H12	ES 171	655551	1575.O15.gz43_209577

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055433A:B07	ES 171	644371	1575.O16.gz43_209593
M00055433A:B08	ES 171	446932	1575.O17.gz43_209609
M00055433A:C02	ES 171	641925	1575.O18.gz43_209625
M00055433A:E04	ES 171	649195	1575.O22.gz43_209689
M00055433C:A11	ES 171	638758	1575.O24.gz43_209721
M00055433D:A09	ES 171	651211	1575.P02.gz43_209370
M00055433D:C07	ES 171	458734	1575.P04.gz43_209402
M00055433D:F06	ES 171	492242	1575.P06.gz43_209434
M00055434A:A03	ES 171	647109	1575.P08.gz43_209466
M00055434C:B11	ES 171	651020	1575.P18.gz43_209626
M00055434D:B06	ES 171	640369	1575.P21.gz43_209674
M00055434D:E09	ES 171	57183	1575.P22.gz43_209690
M00055435B:C09	ES 171	639829	1576.A04.gz43_209771
M00055435C:E12	ES 171	640055	1576.A08.gz43_209835
M00055435D:G11	ES 171	639287	1576.A13.gz43_209915
M00055436A:E04	ES 171	626061	1576.A15.gz43_209947
M00055436B:B06	ES 171	639711	1576.A19.gz43_210011
M00055436B:B09	ES 171	454409	1576.A20.gz43_210027
M00055437D:B06	ES 171	466092	1576.B17.gz43_209980
M00055439B:B07	ES 171	640522	1576.C21.gz43_210045
M00055439B:C10	ES 171	450199	1576.C23.gz43_210077
M00055439D:E08	ES 171	648506	1576.D11.gz43_209886
M00055440D:D02	ES 171	653616	1576.E09.gz43_209855
M00055441A:G07	ES 171	640734	1576.E16.gz43_209967
M00055441C:H06	ES 171	640230	1576.F03.gz43_209760
M00055443D:G04	ES 171	649288	1576.G13.gz43_209921
M00055444D:C05	ES 171	639750	1576.H03.gz43_209762
M00055446B:A12	ES 171	484145	1576.I05.gz43_209795
M00055446B:D08	ES 171	639928	1576.I08.gz43_209843
M00055450B:G07	ES 171	526606	1576.L08.gz43_209846
M00055451B:D08	ES 171	446439	1576.M09.gz43_209863
M00055451B:D12	ES 171	456125	1576.M10.gz43_209879
M00055451C:B08	ES 171	624440	1576.M12.gz43_209911
M00055451C:E10	ES 171	639786	1576.M14.gz43_209943
M00055453D:E12	ES 171	560791	1576.O12.gz43_209913
M00055455B:G12	ES 171	479051	1576.P24.gz43_210106
M00055456A:B03	ES 171	559369	1585.A06.gz43_210283
M00055456A:F01	ES 171	642478	1585.A10.gz43_210347
M00055456B:G08	ES 171	641645	1585.A22.gz43_210539
M00055456C:A10	ES 171	466440	1585.B02.gz43_210220
M00055456C:G04	ES 171	484126	1585.B06.gz43_210284
M00055456D:E06	ES 171	452202	1585.B13.gz43_210396
M00055456D:G04	ES 171	639932	1585.B14.gz43_210412
M00055457D:F09	ES 171	650605	1585.B23.gz43_210556

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055458B:B04	ES 171	648123	1585.C02.gz43_210221
M00055458C:G02	ES 171	643843	1585.C11.gz43_210365
M00055458D:F04	ES 171	640997	1585.C16.gz43_210445
M00055459B:A02	ES 171	641467	1585.C22.gz43_210541
M00055460A:D01	ES 171	640662	1585.D14.gz43_210414
M00055460B:G06	ES 171	598589	1585.E03.gz43_210239
M00055460C:C12	ES 171	640561	1585.E06.gz43_210287
M00055460C:D10	ES 171	592346	1585.E07.gz43_210303
M00055460C:G09	ES 171	592346	1585.E11.gz43_210367
M00055460D:B06	ES 171	641066	1585.E15.gz43_210431
M00055461A:A06	ES 171	643991	1585.E23.gz43_210559
M00055461A:H03	ES 171	447863	1585.F03.gz43_210240
M00055461C:E05	ES 171	640792	1585.F13.gz43_210400
M00055461D:C09	ES 171	607422	1585.F17.gz43_210464
M00055462A:A09	ES 171	640368	1585.F22.gz43_210544
M00055462C:A11	ES 172	640400	1585.G12.gz43_210385
M00055462C:C03	ES 172	598589	1585.G14.gz43_210417
M00055462D:H12	ES 172	412416	1585.G22.gz43_210545
M00055463A:A11	ES 172	398061	1585.G23.gz43_210561
M00055463D:G01	ES 172	544461	1585.H09.gz43_210338
M00055464B:E06	ES 172	640913	1585.H13.gz43_210402
M00055464B:E11	ES 172	556654	1585.H14.gz43_210418
M00055464B:G03	ES 172	664711	1585.H15.gz43_210434
M00055464D:A04	ES 172	661194	1585.H19.gz43_210498
M00055464D:F08	ES 172	650914	1585.H22.gz43_210546
M00055465A:C05	ES 172	651038	1585.I01.gz43_210211
M00055465D:F12	ES 172	639607	1585.I13.gz43_210403
M00055466A:C05	ES 172	549611	1585.I15.gz43_210435
M00055466C:A01	ES 172	559343	1585.I23.gz43_210563
M00055467A:A07	ES 172	555820	1585.J07.gz43_210308
M00055467D:A01	ES 172	559549	1585.J20.gz43_210516
M00055467D:C10	ES 172	51939	1585.J22.gz43_210548
M00055467D:G08	ES 172	505933	1585.J24.gz43_210580
M00055468A:A05	ES 172	646318	1585.K02.gz43_210229
M00055468C:B07	ES 172	639726	1585.K16.gz43_210453
M00055469A:D08	ES 172	640068	1585.K24.gz43_210581
M00055469B:A06	ES 172	553402	1585.L04.gz43_210262
M00055469C:F09	ES 172	645201	1585.L12.gz43_210390
M00055470C:F03	ES 172	562067	1585.M07.gz43_210311
M00055470D:F12	ES 172	640293	1585.M12.gz43_210391
M00055491A:H01	ES 172	584745	1585.M17.gz43_210471
M00055492A:D03	ES 172	639136	1585.N04.gz43_210264
M00055492A:H06	ES 172	646303	1585.N10.gz43_210360



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CloneID	ES No	ClusterID	SequenceName
M00055492C:H07	ES 172	646318	1585.N22.gz43_210552
M00055492D:B08	ES 172	474821	1585.N24.gz43_210584
M00055493C:B06	ES 172	556551	1585.O12.gz43_210393
M00055493D:B07	ES 172	555193	1585.O14.gz43_210425
M00055493D:D12	ES 172	650353	1585.O16.gz43_210457
M00055494A:A06	ES 172	645117	1585.O18.gz43_210489
M00055494C:G10	ES 172	562236	1585.P05.gz43_210282
M00055494C:G11	ES 172	558839	1585.P06.gz43_210298
M00055495A:D11	ES 172	642415	1585.P12.gz43_210394
M00055495C:F03	ES 172	237288	1585.P22.gz43_210554
M00055516B:E11	ES 172	552783	1587.A04.gz43_211407
M00055517A:D09	ES 172	650161	1587.A16.gz43_211599
M00055517C:H07	ES 172	492483	1587.B02.gz43_211376
M00055517D:D09	ES 172	446984	1587.B06.gz43_211440
M00055517D:D11	ES 172	290226	1587.B07.gz43_211456
M00055519A:C01	ES 172	558785	1587.B23.gz43_211712
M00055519A:F08	ES 172	234606	1587.C01.gz43_211361
M00055519A:H01	ES 172	644051	1587.C03.gz43_211393
M00055520B:D11	ES 172	590218	1587.D04.gz43_211410
M00055520B:E04	ES 172	481220	1587.D05.gz43_211426
M00055521C:B08	ES 172	597780	1587.E01.gz43_211363
M00055521C:B09	ES 172	638943	1587.E02.gz43_211379
M00055521C:C08	ES 172	639056	1587.E03.gz43_211395
M00055521C:D02	ES 172	559324	1587.E04.gz43_211411
M00055522C:F06	ES 172	561202	1587.F04.gz43_211412
M00055523C:F05	ES 172	551518	1587.F21.gz43_211684
M00055524B:B08	ES 172	640419	1587.G08.gz43_211477
M00055524B:D11	ES 172	648747	1587.G10.gz43_211509
M00055528A:E08	ES 172	641615	1587.J11.gz43_211528
M00055528D:B02	ES 172	645544	1587.K05.gz43_211433
M00055528D:H07	ES 172	649932	1587.K13.gz43_211561
M00055529D:D05	ES 172	643723	1587.L03.gz43_211402
M00055529D:D11	ES 172	646711	1587.L04.gz43_211418
M00055529D:G03	ES 172	555326	1587.L06.gz43_211450
M00055530A:C07	ES 172	649149	1587.L09.gz43_211498
M00055531B:D10	ES 172	639132	1587.M04.gz43_211419
M00055531B:E05	ES 172	650617	1587.M05.gz43_211435
M00055531C:C04	ES 172	644479	1587.M10.gz43_211515
M00055531D:E06	ES 172	639213	1587.M13.gz43_211563
M00055532C:G08	ES 172	639459	1587.N03.gz43_211404
M00055532D:A12	ES 172	207552	1587.N04.gz43_211420
M00055533B:B11	ES 172	641216	1587.N15.gz43_211596
M00055533D:G02	ES 172	116869	1587.O04.gz43_211421
M00055534A:E06	ES 172	194095	1587.O05.gz43_211437

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CloneID	ES No	ClusterID	SequenceName
M00055535B:A11	ES 172	639826	1587.P03.gz43_211406
M00055535C:A03	ES 172	634409	1587.P07.gz43_211470
M00055535C:E08	ES 172	640072	1587.P10.gz43_211518
M00055536B:H11	ES 172	649390	1588.A03.gz43_217281
M00055536D:D12	ES 172	447869	1588.A07.gz43_217345
M00055537C:A01	ES 172	552001	1588.A11.gz43_211923
M00055537C:A01	ES 172	552001	1588.A11.gz43_217409
M00055537C:E04	ES 172	451671	1588.A15.gz43_217473
M00055538A:C05	ES 172	419706	1588.A18.gz43_212035
M00055538B:G09	ES 172	639461	1588.A21.gz43_217569
M00055538C:E04	ES 172	642631	1588.B02.gz43_211780
M00055538D:D12	ES 172	649335	1588.B06.gz43_211844
M00055538D:D12	ES 172	649335	1588.B06.gz43_217330
M00055538D:F12	ES 172	640089	1588.B09.gz43_211892
M00055538D:H07	ES 172	648206	1588.B11.gz43_211924
M00055540D:G11	ES 172	403419	1588.C19.gz43_217539
M00055541C:D02	ES 172	643277	1588.D05.gz43_211830
M00055542B:B11	ES 172	453606	1588.D17.gz43_212022
M00055542B:B11	ES 172	453606	1588.D17.gz43_217508
M00055542C:B02	ES 172	451361	1588.D21.gz43_217572
M00055542C:D07	ES 172	639114	1588.D22.gz43_212102
M00055542C:H05	ES 172	641031	1588.E02.gz43_217269
M00055543B:A06	ES 172	568331	1588.E15.gz43_211991
M00055543C:B09	ES 172	638917	1588.E16.gz43_217493
M00055543D:H01	ES 172	452342	1588.F01.gz43_211768
M00055543D:H03	ES 172	639543	1588.F02.gz43_211784
M00055544A:A07	ES 172	473701	1588.F03.gz43_211800
M00055544C:A01	ES 172	648748	1588.F13.gz43_211960
M00055544C:B07	ES 172	562414	1588.F15.gz43_211992
M00055545A:C01	ES 172	644173	1588.F23.gz43_217606
M00055545B:A04	ES 172	562274	1588.G03.gz43_211801
M00055545B:C01	ES 172	556867	1588.G05.gz43_211833
M00055545C:D09	ES 172	639099	1588.G13.gz43_211961
M00055545D:B06	ES 172	505042	1588.G16.gz43_212009
M00055545D:C03	ES 172	642414	1588.G17.gz43_217511
M00055546B:H03	ES 172	466092	1588.H02.gz43_217272
M00055546C:B01	ES 172	562468	1588.H04.gz43_217304
M00055546C:F11	ES 172	32812	1588.H09.gz43_211898
M00055547A:H11	ES 172	649564	1588.H18.gz43_217528
M00055547B:C05	ES 172	557983	1588.H21.gz43_212090
M00055547B:G09	ES 172	648494	1588.H24.gz43_217624
M00055547C:B01	ES 172	448673	1588.I02.gz43_211787
M00055547C:B07	ES 172	650982	1588.I04.gz43_217305
M00055547D:G06	ES 172	641401	1588.I15.gz43_217481

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CloneID	ES No	ClusterID	SequenceName
M00055548A:D07	ES 172	529799	1588.I18.gz43_217529
M00055548A:F04	ES 172	449891	1588.I22.gz43_217593
M00055548B:A03	ES 172	638837	1588.J02.gz43_217274
M00055548B:C03	ES 172	646159	1588.J06.gz43_211852
M00055548B:G06	ES 172	639480	1588.J09.gz43_211900
M00055548B:G06	ES 172	639480	1588.J09.gz43_217386
M00055548C:E05	ES 172	512634	1588.J13.gz43_211964
M00055548C:G09	ES 172	639295	1588.J17.gz43_212028
M00055549A:B04	ES 172	442531	1588.J22.gz43_212108
M00055549C:E10	ES 172	639316	1588.K08.gz43_211885
M00055549C:E10	ES 172	639316	1588.K08.gz43_217371
M00055549C:F08	ES 172	453768	1588.K10.gz43_217403
M00055550A:C07	ES 172	645365	1588.K19.gz43_212061
M00055550C:E07	ES 172	450123	1588.L05.gz43_211838
M00055550C:F03	ES 172	645938	1588.L07.gz43_211870
M00055550D:D02	ES 172	457146	1588.L11.gz43_217420
M00055551A:A12	ES 172	650521	1588.L18.gz43_212046
M00055551C:C08	ES 172	551662	1588.M07.gz43_217357
M00055552C:G03	ES 172	447379	1588.M20.gz43_217565
M00055553A:D08	ES 172	406436	1588.N01.gz43_217262
M00055553A:F11	ES 172	645891	1588.N02.gz43_211792
M00055553A:F11	ES 172	645891	1588.N02.gz43_217278
M00055553A:H08	ES 172	420702	1588.N04.gz43_211824
M00055553B:D05	ES 172	554789	1588.N06.gz43_217342
M00055553B:H04	ES 172	644242	1588.N09.gz43_211904
M00055553C:D06	ES 172	644723	1588.N11.gz43_211936
M00055553C:H12	ES 172	641078	1588.N15.gz43_212000
M00055553D:C07	ES 172	640747	1588.N16.gz43_212016
M00055553D:E06	ES 172	645781	1588.N18.gz43_217534
M00055554C:B04	ES 172	644012	1588.O05.gz43_217327
M00055554D:F01	ES 172	377692	1588.O11.gz43_217423
M00055555D:B05	ES 172	639395	1588.O22.gz43_217599
M00055556A:A04	ES 172	646350	1588.P05.gz43_211842
M00055556A:E07	ES 172	649099	1588.P06.gz43_211858
M00055556A:E07	ES 172	649099	1588.P06.gz43_217344
M00055556C:H09	ES 172	701221	1588.P14.gz43_217472
M00055557A:A04	ES 172	447023	1588.P18.gz43_217536
M00055557A:C11	ES 172	639425	1588.P21.gz43_212098
M00055557B:B10	ES 172	477064	1588.P24.gz43_217632
M00055557B:F07	ES 172	509798	1597.A03.gz43_212179
M00055558B:G11	ES 172	637966	1597.A16.gz43_212387
M00055558D:C08	ES 172	460666	1597.A21.gz43_212467
M00055558D:D07	ES 172	645913	1597.A23.gz43_212499
M00055559A:D06	ES 172	469731	1597.B06.gz43_212228

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055559C:D07	ES 172	555021	1597.B12.gz43_212324
M00055560D:C03	ES 172	470822	1597.C10.gz43_212293
M00055561A:F07	ES 172	647614	1597.C17.gz43_212405
M00055561B:G12	ES 172	645538	1597.C24.gz43_212517
M00055561C:C07	ES 172	639781	1597.D05.gz43_212214
M00055562B:D03	ES 172	592122	1597.D14.gz43_212358
M00055562B:H02	ES 172	475152	1597.D17.gz43_212406
M00055562C:F02	ES 172	640195	1597.D22.gz43_212486
M00055562D:B06	ES 172	639056	1597.E05.gz43_212215
M00055563A:A02	ES 172	640356	1597.E08.gz43_212263
M00055563A:C03	ES 172	647431	1597.E09.gz43_212279
M00055563A:D02	ES 172	449258	1597.E10.gz43_212295
M00055565A:C08	ES 172	454825	1597.F10.gz43_212296
M00055565A:F11	ES 172	553318	1597.F16.gz43_212392
M00055565B:F04	ES 172	596882	1597.F18.gz43_212424
M00055565D:G08	ES 172	664195	1597.G03.gz43_212185
M00055566A:E02	ES 172	639593	1597.G06.gz43_212233
M00055567A:A06	ES 172	446230	1597.G23.gz43_212505
M00055567A:A11	ES 172	647069	1597.G24.gz43_212521
M00055567B:G07	ES 172	649829	1597.H04.gz43_212202
M00055568A:B04	ES 172	556511	1597.H15.gz43_212378
M00055568A:D05	ES 172	646293	1597.H17.gz43_212410
M00055568C:F07	ES 172	638869	1597.H24.gz43_212522
M00055568C:G11	ES 172	641890	1597.I01.gz43_212155
M00055569A:C08	ES 172	643488	1597.I10.gz43_212299
M00055569A:D01	ES 172	650740	1597.I12.gz43_212331
M00055569A:F06	ES 172	644928	1597.I18.gz43_212427
M00055569B:G10	ES 172	553114	1597.I24.gz43_212523
M00055569D:C02	ES 172	557975	1597.J06.gz43_212236
M00055570B:F07	ES 172	659031	1597.J12.gz43_212332
M00055572C:E08	ES 172	447423	1597.L05.gz43_212222
M00055573A:B11	ES 172	666644	1597.L12.gz43_212334
M00055573B:D11	ES 172	589483	1597.L18.gz43_212430
M00055573B:E01	ES 172	553602	1597.L19.gz43_212446
M00055574A:D12	ES 172	642527	1597.M09.gz43_212287
M00055574A:F12	ES 172	640181	1597.M11.gz43_212319
M00055574B:D04	ES 172	557713	1597.M15.gz43_212383
M00055574B:F06	ES 172	650235	1597.M17.gz43_212415
M00055574D:B07	ES 172	649431	1597.M24.gz43_212527
M00055574D:E02	ES 173	649668	1597.N02.gz43_212176
M00055575C:B04	ES 173	45921	1597.N14.gz43_212368
M00055575D:G04	ES 173	640956	1597.N18.gz43_212432
M00055576A:D09	ES 173	650593	1597.N21.gz43_212480

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055576A:F07	ES 173	649349	1597.N23.gz43_212512
M00055576D:E09	ES 173	643162	1597.O12.gz43_212337
M00055577A:G09	ES 173	640851	1597.O20.gz43_212465
M00055577B:F05	ES 173	648483	1597.O24.gz43_212529
M00055577C:G02	ES 173	639698	1597.P05.gz43_212226
M00055578B:D05	ES 173	362177	1597.P12.gz43_212338
M00055578C:F11	ES 173	668852	1597.P22.gz43_212498
M00055578D:E11	ES 173	561602	1597.P24.gz43_212530
M00055579C:D04	ES 173	641191	1598.A07.gz43_212627
M00055579D:C11	ES 173	459521	1598.A11.gz43_212691
M00055579D:G09	ES 173	641957	1598.A13.gz43_212723
M00055580B:B08	ES 173	641425	1598.A17.gz43_212787
M00055581A:C02	ES 173	640025	1598.B02.gz43_212548
M00055581C:A01	ES 173	648580	1598.B04.gz43_212580
M00055581C:B08	ES 173	647360	1598.B05.gz43_212596
M00055582B:A06	ES 173	648159	1598.B15.gz43_212756
M00055583A:A05	ES 173	641262	1598.C05.gz43_212597
M00055583C:A01	ES 173	86311	1598.C18.gz43_212805
M00055584A:G11	ES 173	641925	1598.D06.gz43_212614
M00055584B:B01	ES 173	639070	1598.D07.gz43_212630
M00055585A:E12	ES 173	651000	1598.D21.gz43_212854
M00055585B:F01	ES 173	415538	1598.E02.gz43_212551
M00055585C:F05	ES 173	449247	1598.E06.gz43_212615
M00055586A:F05	ES 173	639116	1598.E11.gz43_212695
M00055586C:A06	ES 173	553087	1598.E21.gz43_212855
M00055586D:G07	ES 173	645707	1598.F05.gz43_212600
M00055588A:C03	ES 173	639444	1598.G05.gz43_212601
M00055588B:H11	ES 173	140909	1598.G11.gz43_212697
M00055588C:G09	ES 173	509973	1598.G15.gz43_212761
M00055589A:B06	ES 173	646914	1598.G21.gz43_212857
M00055589B:E08	ES 173	644572	1598.H03.gz43_212570
M00055589B:H02	ES 173	642008	1598.H04.gz43_212586
M00055590A:B03	ES 173	464091	1598.H11.gz43_212698
M00055590A:E01	ES 173	645264	1598.H15.gz43_212762
M00055590D:G07	ES 173	635439	1598.I11.gz43_212699
M00055591A:B08	ES 173	641472	1598.I12.gz43_212715
M00055591D:A07	ES 173	556868	1598.J04.gz43_212588
M00055591D:E08	ES 173	512521	1598.J05.gz43_212604
M00055592B:C10	ES 173	641467	1598.J12.gz43_212716
M00055593A:F08	ES 173	641838	1598.K09.gz43_212669
M00055593C:D08	ES 173	638941	1598.K14.gz43_212749
M00055594B:A01	ES 173	446371	1598.K21.gz43_212861
M00055594C:B03	ES 173	470769	1598.L04.gz43_212590
M00055594C:F11	ES 173	646590	1598.L06.gz43_212622

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055594D:F07	ES 173	455864	1598.L12.gz43_212718
M00055595C:F12	ES 173	447272	1598.M01.gz43_212543
M00055595C:G03	ES 173	478229	1598.M02.gz43_212559
M00055595D:C04	ES 173	554273	1598.M04.gz43_212591
M00055596A:C02	ES 173	144626	1598.M08.gz43_212655
M00055596A:E07	ES 173	640826	1598.M10.gz43_212687
M00055596B:D03	ES 173	458979	1598.M16.gz43_212783
M00055597B:B04	ES 173	463028	1598.N05.gz43_212608
M00055597D:B05	ES 173	641440	1598.N09.gz43_212672
M00055597D:E10	ES 173	564440	1598.N11.gz43_212704
M00055599D:C08	ES 173	640298	1598.N23.gz43_212896
M00055600A:C04	ES 173	507188	1598.O07.gz43_212641
M00055600C:C02	ES 173	647312	1598.O17.gz43_212801
M00055600D:B02	ES 173	515931	1598.O19.gz43_212833
M00055601B:D12	ES 173	640695	1598.P05.gz43_212610
M00055601B:H02	ES 173	641191	1598.P07.gz43_212642
M00055601C:C11	ES 173	553925	1598.P10.gz43_212690
M00055602A:D04	ES 173	640634	1598.P20.gz43_212850
M00055602B:B10	ES 173	201904	1599.A01.gz43_212923
M00055602B:B12	ES 173	644764	1599.A03.gz43_212955
M00055602D:G08	ES 173	643906	1599.A15.gz43_213147
M00055603D:A09	ES 173	641338	1599.B01.gz43_212924
M00055604D:E07	ES 173	643279	1599.B09.gz43_213052
M00055604D:F05	ES 173	559380	1599.B10.gz43_213068
M00055606A:B11	ES 173	554833	1599.B19.gz43_213212
M00055606A:F09	ES 173	461524	1599.B21.gz43_213244
M00055606C:F04	ES 173	641839	1599.C09.gz43_213053
M00055606D:C05	ES 173	641542	1599.C12.gz43_213101
M00055608C:E03	ES 173	641680	1599.D10.gz43_213070
M00055608C:G11	ES 173	607715	1599.D15.gz43_213150
M00055609B:D10	ES 173	460929	1599.E01.gz43_212927
M00055609B:F10	ES 173	640930	1599.E03.gz43_212959
M00055610B:E04	ES 173	454527	1599.F02.gz43_212944
M00055610D:H09	ES 173	639255	1599.F09.gz43_213056
M00055611C:E03	ES 173	551896	1599.F24.gz43_213296
M00055612A:H05	ES 173	645031	1599.G13.gz43_213121
M00055615C:E01	ES 173	640868	1599.I08.gz43_213043
M00055615D:C07	ES 173	639703	1599.I11.gz43_213091
M00055617A:H12	ES 173	641254	1599.J09.gz43_213060
M00055619A:C03	ES 173	213631	1599.K12.gz43_213109
M00055619B:H04	ES 173	639480	1599.K19.gz43_213221
M00055619C:D06	ES 173	647518	1599.K24.gz43_213301
M00055619C:F07	ES 173	640221	1599.L01.gz43_212934
M00055619D:A04	ES 173	640382	1599.L05.gz43_212998

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055620D:D05	ES 173	640416	1599.L17.gz43_213190
M00055621B:G03	ES 173	561626	1599.L23.gz43_213286
M00055623D:G05	ES 173	641069	1599.N09.gz43_213064
M00055628B:B07	ES 173	607138	1599.P21.gz43_213258
M00055629A:D08	ES 173	647266	1600.A15.gz43_213531
M00055629B:G09	ES 173	455075	1600.A22.gz43_213643
M00055630B:E09	ES 173	561180	1600.B13.gz43_213500
M00055630B:G04	ES 173	645004	1600.B15.gz43_213532
M00055632A:B11	ES 173	559423	1600.B24.gz43_213676
M00055632D:A06	ES 173	640799	1600.C10.gz43_213453
M00055633B:A08	ES 173	634012	1600.C21.gz43_213629
M00055633B:G02	ES 173	131348	1600.C24.gz43_213677
M00055633D:A02	ES 173	649717	1600.D04.gz43_213358
M00055634C:C10	ES 173	446659	1600.D21.gz43_213630
M00055634C:F09	ES 173	166041	1600.D23.gz43_213662
M00055636A:H12	ES 173	650180	1600.E24.gz43_213679
M00055637B:A01	ES 173	642361	1600.F24.gz43_213680
M00055637B:H12	ES 173	641253	1600.G05.gz43_213377
M00055638A:A10	ES 173	554335	1600.G13.gz43_213505
M00055638D:D07	ES 173	639934	1600.H02.gz43_213330
M00055638D:E09	ES 173	646695	1600.H04.gz43_213362
M00055639D:D03	ES 173	548959	1600.I01.gz43_213315
M00055639D:F08	ES 173	640956	1600.I03.gz43_213347
M00055640A:G03	ES 173	635965	1600.I07.gz43_213411
M00055640B:C01	ES 173	472129	1600.I09.gz43_213443
M00055640C:E06	ES 173	557401	1600.I12.gz43_213491
M00055640C:F05	ES 173	467381	1600.I13.gz43_213507
M00055640C:F08	ES 173	151279	1600.I14.gz43_213523
M00055641A:C12	ES 173	562000	1600.I19.gz43_213603
M00055642D:A05	ES 173	553516	1600.J23.gz43_213668
M00055643A:C01	ES 173	451615	1600.K05.gz43_213381
M00055643B:E05	ES 173	642246	1600.K11.gz43_213477
M00055643C:G10	ES 173	645261	1600.K18.gz43_213589
M00055643D:A05	ES 173	656268	1600.K20.gz43_213621
M00055643D:G11	ES 173	561069	1600.K24.gz43_213685
M00055644A:D10	ES 173	549124	1600.L02.gz43_213334
M00055644A:D12	ES 173	554722	1600.L03.gz43_213350
M00055644B:H12	ES 173	379040	1600.L07.gz43_213414
M00055645A:C07	ES 173	156097	1600.L19.gz43_213606
M00055646C:B04	ES 173	646352	1600.M13.gz43_213511
M00055647A:H10	ES 173	446621	1600.M19.gz43_213607
M00055647B:A05	ES 173	641210	1600.M20.gz43_213623
M00055647C:D02	ES 173	639886	1600.N04.gz43_213368
M00055647D:B11	ES 173	467563	1600.N11.gz43_213480

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055648B:C01	ES 173	453441	1600.N19.gz43_213608
M00055649A:H07	ES 173	640320	1600.O11.gz43_213481
M00055649C:F02	ES 173	491368	1600.O16.gz43_213561
M00055650A:B05	ES 173	553285	1600.O21.gz43_213641
M00055650C:F12	ES 173	640029	1600.P09.gz43_213450
M00055651A:D06	ES 173	638779	1600.P16.gz43_213562
M00055651A:E06	ES 173	641702	1600.P17.gz43_213578
M00055651B:F08	ES 173	458736	1600.P20.gz43_213626
M00055651C:E01	ES 173	550515	1600.P24.gz43_213690
M00055651C:F07	ES 173	643513	1669.A01.gz43_260687
M00055652A:G11	ES 173	554510	1669.A07.gz43_260783
M00055652B:B11	ES 173	618998	1669.A10.gz43_260831
M00055652B:F12	ES 173	406734	1669.A12.gz43_260863
M00055653A:G08	ES 173	649631	1669.A24.gz43_261055
M00055653B:C03	ES 173	647333	1669.B06.gz43_260768
M00055653B:E12	ES 173	86311	1669.B09.gz43_260816
M00055653B:G01	ES 173	644971	1669.B10.gz43_260832
M00055653B:G11	ES 173	640259	1669.B11.gz43_260848
M00055653D:H02	ES 173	463312	1669.B23.gz43_261040
M00055654A:B07	ES 173	462247	1669.C01.gz43_260689
M00055654B:G09	ES 173	472226	1669.C06.gz43_260769
M00055654C:A05	ES 173	641469	1669.C08.gz43_260801
M00055654C:C10	ES 173	638971	1669.C09.gz43_260817
M00055654C:D03	ES 173	556488	1669.C10.gz43_260833
M00055654D:F02	ES 173	650677	1669.C17.gz43_260945
M00055655A:A09	ES 173	642111	1669.C18.gz43_260961
M00055655B:B08	ES 173	642411	1669.C22.gz43_261025
M00055656A:E09	ES 173	643804	1669.D11.gz43_260850
M00055657A:B04	ES 173	450883	1669.E08.gz43_260803
M00055659A:A08	ES 173	648773	1669.F11.gz43_260852
M00055659C:B10	ES 173	639706	1669.F21.gz43_261012
M00055659C:D06	ES 173	639674	1669.F24.gz43_261060
M00055660A:A06	ES 173	452687	1669.G10.gz43_260837
M00055660A:C05	ES 173	503275	1669.G11.gz43_260853
M00055660A:C08	ES 173	643563	1669.G12.gz43_260869
M00055660B:H02	ES 173	589483	1669.G17.gz43_260949
M00055661B:E07	ES 173	455778	1669.H06.gz43_260774
M00055661C:E11	ES 173	658447	1669.H12.gz43_260870
M00055662B:F11	ES 173	447585	1669.I04.gz43_260743
M00055662C:C11	ES 173	523875	1669.I07.gz43_260791
M00055662C:D05	ES 173	645758	1669.I08.gz43_260807
M00055662C:D12	ES 173	641379	1669.I09.gz43_260823
M00055662C:H06	ES 173	446188	1669.I12.gz43_260871
M00055662D:A09	ES 173	639596	1669.I15.gz43_260919



Table 13

CloneID	ES No	ClusterID	SequenceName
M00055662D:B07	ES 173	639665	1669.I17.gz43_260951
M00055662D:E05	ES 173	640018	1669.I20.gz43_260999
M00055662D:F09	ES 173	559575	1669.I21.gz43_261015
M00055663A:B02	ES 173	641091	1669.I22.gz43_261031
M00055663A:G04	ES 173	640261	1669.I24.gz43_261063
M00055663A:H10	ES 173	641658	1669.J01.gz43_260696
M00055663B:E02	ES 173	640078	1669.J04.gz43_260744
M00055663C:D05	ES 173	658271	1669.J07.gz43_260792
M00055663C:F05	ES 173	512521	1669.J08.gz43_260808
M00055663D:B05	ES 173	643909	1669.J10.gz43_260840
M00055664B:G08	ES 173	640211	1669.J16.gz43_260936
M00055665B:A12	ES 173	451906	1669.K06.gz43_260777
M00055665B:B10	ES 174	465104	1669.K07.gz43_260793
M00055665D:F11	ES 174	640179	1669.K18.gz43_260969
M00055666A:G04	ES 174	642078	1669.K23.gz43_261049
M00055666B:C03	ES 174	448484	1669.L07.gz43_260794
M00055666B:E06	ES 174	640678	1669.L11.gz43_260858
M00055666C:C11	ES 174	639804	1669.L12.gz43_260874
M00055666D:D08	ES 174	639932	1669.L16.gz43_260938
M00055667A:B12	ES 174	642332	1669.L20.gz43_261002
M00055667A:H10	ES 174	456561	1669.L23.gz43_261050
M00055667B:C08	ES 174	639752	1669.M01.gz43_260699
M00055667C:F07	ES 174	646894	1669.M10.gz43_260843
M00055667D:B01	ES 174	561894	1669.M12.gz43_260875
M00055668B:A10	ES 174	550999	1669.M19.gz43_260987
M00055668B:B07	ES 174	557401	1669.M20.gz43_261003
M00055668B:D05	ES 174	639906	1669.M21.gz43_261019
M00055668C:A04	ES 174	642068	1669.N02.gz43_260716
M00055668C:F05	ES 174	648340	1669.N05.gz43_260764
M00055668D:E11	ES 174	556750	1669.N10.gz43_260844
M00055669B:G02	ES 174	648352	1669.N18.gz43_260972
M00055669D:B08	ES 174	639743	1669.O02.gz43_260717
M00055670A:B04	ES 174	648352	1669.O07.gz43_260797
M00055670D:F02	ES 174	641683	1669.O17.gz43_260957
M00055671A:H03	ES 174	518569	1669.P01.gz43_260702
M00055671B:B02	ES 174	642230	1669.P03.gz43_260734
M00055672D:F06	ES 174	640092	1670.A08.gz43_261183
M00055673A:E09	ES 174	95617	1670.A11.gz43_261231
M00055673B:A04	ES 174	645146	1670.A16.gz43_261311
M00055673B:B08	ES 174	639469	1670.A18.gz43_261343
M00055673D:C01	ES 174	639805	1670.B07.gz43_261168
M00055674A:C11	ES 174	651088	1670.B12.gz43_261248
M00055674C:E05	ES 174	645968	1670.B21.gz43_261392

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055675A:G03	ES 174	643522	1670.C06.gz43_261153
M00055675D:E04	ES 174	650673	1670.C14.gz43_261281
M00055676B:D05	ES 174	446242	1670.C20.gz43_261377
M00055676D:H07	ES 174	426366	1670.D05.gz43_261138
M00055678C:H05	ES 174	289328	1670.D14.gz43_261282
M00055679B:E03	ES 174	642321	1670.D23.gz43_261426
M00055680B:D09	ES 174	553642	1670.E15.gz43_261299
M00055680B:H04	ES 174	647427	1670.E17.gz43_261331
M00055680C:E01	ES 174	493622	1670.E20.gz43_261379
M00055681A:F02	ES 174	416808	1670.E24.gz43_261443
M00055681D:F11	ES 174	642502	1670.F18.gz43_261348
M00055682A:B07	ES 174	637966	1670.F22.gz43_261412
M00055682C:D06	ES 174	641618	1670.G09.gz43_261205
M00055682D:G02	ES 174	641902	1670.G19.gz43_261365
M00055683B:D10	ES 174	640645	1670.H06.gz43_261158
M00055683C:A03	ES 174	557625	1670.H10.gz43_261222
M00055683C:D11	ES 174	644699	1670.H14.gz43_261286
M00055683C:H11	ES 174	553921	1670.H17.gz43_261334
M00055684B:D06	ES 174	599838	1670.I10.gz43_261223
M00055684D:A10	ES 174	506901	1670.I18.gz43_261351
M00055685A:E10	ES 174	601137	1670.I23.gz43_261431
M00055685A:F02	ES 174	647856	1670.I24.gz43_261447
M00055685A:F06	ES 174	447802	1670.J02.gz43_261096
M00055685B:E12	ES 174	645909	1670.J06.gz43_261160
M00055685D:B06	ES 174	649558	1670.J18.gz43_261352
M00055686B:D03	ES 174	641624	1670.K06.gz43_261161
M00055686D:E04	ES 174	641726	1670.K12.gz43_261257
M00055686D:E10	ES 174	641728	1670.K13.gz43_261273
M00055687C:B04	ES 174	554564	1670.K24.gz43_261449
M00055687C:B11	ES 174	649284	1670.L01.gz43_261082
M00055687C:F01	ES 174	643594	1670.L05.gz43_261146
M00055687C:F07	ES 174	639136	1670.L06.gz43_261162
M00055688A:A02	ES 174	641287	1670.L09.gz43_261210
M00055688A:E04	ES 174	649921	1670.L12.gz43_261258
M00055689B:F04	ES 174	446675	1670.M05.gz43_261147
M00055689C:B03	ES 174	634122	1670.M08.gz43_261195
M00055689C:C03	ES 174	634122	1670.M10.gz43_261227
M00055689D:G01	ES 174	567636	1670.M18.gz43_261355
M00055691A:D08	ES 174	640826	1670.M22.gz43_261419
M00055691B:E07	ES 174	640889	1670.N03.gz43_261116
M00055691C:E02	ES 174	646638	1670.N06.gz43_261164
M00055691D:B07	ES 174	642644	1670.N11.gz43_261244
M00055691D:E04	ES 174	502609	1670.N13.gz43_261276
M00055692A:E05	ES 174	561920	1670.N18.gz43_261356

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055695D:E01	ES 174	645431	1670.P12.gz43_261262
M00055699C:D02	ES 174	41141	1671.B11.gz43_261616
M00055700B:E10	ES 174	553985	1671.B23.gz43_261808
M00055701A:B04	ES 174	560546	1671.C12.gz43_261633
M00055701B:C03	ES 174	642039	1671.C17.gz43_261713
M00055702C:D01	ES 174	646028	1671.D09.gz43_261586
M00055702C:F11	ES 174	640947	1671.D10.gz43_261602
M00055702D:H10	ES 174	605761	1671.D11.gz43_261618
M00055704A:D09	ES 174	642062	1671.E08.gz43_261571
M00055704B:C04	ES 174	551415	1671.E12.gz43_261635
M00055705C:F12	ES 174	471268	1671.F17.gz43_261716
M00055705C:G01	ES 174	641876	1671.F18.gz43_261732
M00055706B:H12	ES 174	463548	1671.G10.gz43_261605
M00055707A:B07	ES 174	649429	1671.G14.gz43_261669
M00055707A:E07	ES 174	468316	1671.G17.gz43_261717
M00055707A:F11	ES 174	453006	1671.G20.gz43_261765
M00055707B:E02	ES 174	640879	1671.G22.gz43_261797
M00055709D:G10	ES 174	417259	1671.H17.gz43_261718
M00055710B:E04	ES 174	641700	1671.H22.gz43_261798
M00055711B:B08	ES 174	561422	1671.I07.gz43_261559
M00055711C:A07	ES 174	463368	1671.I11.gz43_261623
M00055711D:H12	ES 174	558890	1671.I21.gz43_261783
M00055713C:B06	ES 174	455552	1671.J08.gz43_261576
M00055713C:D11	ES 174	469688	1671.J10.gz43_261608
M00055713C:F12	ES 174	558086	1671.J11.gz43_261624
M00055713C:H01	ES 174	446933	1671.J12.gz43_261640
M00055715A:D10	ES 174	463368	1671.K08.gz43_261577
M00055715C:C11	ES 174	640534	1671.K20.gz43_261769
M00055717A:C06	ES 174	644325	1671.L10.gz43_261610
M00055717A:H01	ES 174	521888	1671.L12.gz43_261642
M00055717B:A03	ES 174	451401	1671.L14.gz43_261674
M00055717B:E04	ES 174	421826	1671.L17.gz43_261722
M00055717C:B07	ES 174	536415	1671.L23.gz43_261818
M00055718A:F01	ES 174	478192	1671.M09.gz43_261595
M00055718A:H05	ES 174	640282	1671.M10.gz43_261611
M00055718B:H11	ES 174	465589	1671.M17.gz43_261723
M00055719A:A06	ES 174	646105	1671.N09.gz43_261596
M00055719A:D11	ES 174	557710	1671.N12.gz43_261644
M00055719A:G04	ES 174	645505	1671.N17.gz43_261724
M00055719A:G12	ES 174	510195	1671.N18.gz43_261740
M00055719C:A09	ES 174	640282	1671.N23.gz43_261820
M00055720B:D06	ES 174	645344	1671.O12.gz43_261645
M00055721A:A07	ES 174	466265	1671.O22.gz43_261805
M00055721B:D08	ES 174	642288	1671.P07.gz43_261566

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055722A:B05	ES 174	492094	1671.P18.gz43_261742
M00055722A:C04	ES 174	600115	1671.P21.gz43_261790
M00055722B:A01	ES 174	498194	1672.A01.gz43_261841
M00055722B:G12	ES 174	645171	1672.A06.gz43_261921
M00055722C:E11	ES 174	650303	1672.A12.gz43_262017
M00055722C:F11	ES 174	642491	1672.A13.gz43_262033
M00055722D:A07	ES 174	641056	1672.A14.gz43_262049
M00055722D:B10	ES 174	460967	1672.A17.gz43_262097
M00055722D:E05	ES 174	544797	1672.A19.gz43_262129
M00055722D:G12	ES 174	470769	1672.A23.gz43_262193
M00055723A:B08	ES 174	556326	1672.B03.gz43_261874
M00055723A:C04	ES 174	647688	1672.B04.gz43_261890
M00055723A:F04	ES 174	649360	1672.B07.gz43_261938
M00055723B:A09	ES 174	642078	1672.B11.gz43_262002
M00055723B:C03	ES 174	642197	1672.B14.gz43_262050
M00055723B:H08	ES 174	46976	1672.B17.gz43_262098
M00055723C:A08	ES 174	648472	1672.B18.gz43_262114
M00055723C:B02	ES 174	489426	1672.B19.gz43_262130
M00055723C:F09	ES 174	503923	1672.B22.gz43_262178
M00055723D:C04	ES 174	522497	1672.C03.gz43_261875
M00055723D:E05	ES 174	649106	1672.C06.gz43_261923
M00055724A:C12	ES 174	284586	1672.C12.gz43_262019
M00055724A:E03	ES 174	645018	1672.C15.gz43_262067
M00055724A:G08	ES 174	504568	1672.C17.gz43_262099
M00055724B:D04	ES 174	467822	1672.C20.gz43_262147
M00055724B:G03	ES 174	642722	1672.C23.gz43_262195
M00055724B:H03	ES 174	557221	1672.D02.gz43_261860
M00055724D:A02	ES 174	559828	1672.D17.gz43_262100
M00055725A:F12	ES 174	641305	1672.E02.gz43_261861
M00055725A:G07	ES 174	557833	1672.E03.gz43_261877
M00055725D:B02	ES 174	522548	1672.E14.gz43_262053
M00055725D:F05	ES 174	452212	1672.E19.gz43_262133
M00055726C:F01	ES 174	645004	1672.F16.gz43_262086
M00055726D:H12	ES 174	489249	1672.F24.gz43_262214
M00055727A:G01	ES 174	507188	1672.G02.gz43_261863
M00055727B:F10	ES 174	642535	1672.G12.gz43_262023
M00055727C:B02	ES 174	559776	1672.G16.gz43_262087
M00055727D:G01	ES 174	641070	1672.H02.gz43_261864
M00055727D:H04	ES 174	639711	1672.H04.gz43_261896
M00055728B:G11	ES 174	647060	1672.H16.gz43_262088
M00055728C:B08	ES 174	455113	1672.H17.gz43_262104
M00055728D:F02	ES 174	554708	1672.H22.gz43_262184
M00055729A:B12	ES 174	672032	1672.I02.gz43_261865
M00055729B:G03	ES 174	641101	1672.I12.gz43_262025

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055729C:D11	ES 174	642315	1672.I16.gz43_262089
M00055729C:E02	ES 174	477064	1672.I17.gz43_262105
M00055729D:A06	ES 174	546705	1672.I18.gz43_262121
M00055729D:F05	ES 174	644609	1672.I21.gz43_262169
M00055731A:C03	ES 174	461583	1672.J13.gz43_262042
M00055731A:G05	ES 174	640704	1672.J17.gz43_262106
M00055731A:H07	ES 174	235397	1672.J18.gz43_262122
M00055731C:F09	ES 174	454383	1672.K06.gz43_261931
M00055731C:H07	ES 174	639458	1672.K08.gz43_261963
M00055731D:B10	ES 174	646129	1672.K11.gz43_262011
M00055731D:E12	ES 174	555681	1672.K13.gz43_262043
M00055731D:F09	ES 174	640879	1672.K15.gz43_262075
M00055732A:B04	ES 174	651085	1672.K18.gz43_262123
M00055732A:C12	ES 174	322255	1672.K19.gz43_262139
M00055732A:F09	ES 174	642557	1672.K21.gz43_262171
M00055733A:G04	ES 174	642631	1672.L11.gz43_262012
M00055733B:F11	ES 174	504501	1672.L16.gz43_262092
M00055733B:H05	ES 174	419443	1672.L17.gz43_262108
M00055733C:G02	ES 174	383609	1672.L18.gz43_262124
M00055733C:H12	ES 174	650397	1672.L20.gz43_262156
M00055733D:B11	ES 174	561968	1672.L21.gz43_262172
M00055733D:D04	ES 174	645151	1672.L23.gz43_262204
M00055733D:H01	ES 174	416377	1672.M04.gz43_261901
M00055734D:A02	ES 174	461474	1672.M16.gz43_262093
M00055734D:D01	ES 174	646609	1672.M19.gz43_262141
M00055734D:E05	ES 174	642376	1672.M21.gz43_262173
M00055734D:E10	ES 174	645165	1672.M22.gz43_262189
M00055734D:G12	ES 174	558146	1672.M23.gz43_262205
M00055735A:B05	ES 174	647669	1672.N01.gz43_261854
M00055735B:F11	ES 175	642111	1672.N10.gz43_261998
M00055735C:G08	ES 175	648667	1672.N14.gz43_262062
M00055735D:C01	ES 175	502826	1672.N18.gz43_262126
M00055735D:E10	ES 175	556336	1672.N19.gz43_262142
M00055736A:B11	ES 175	648265	1672.N23.gz43_262206
M00055736B:C08	ES 175	643897	1672.O04.gz43_261903
M00055736C:D06	ES 175	466434	1672.O09.gz43_261983
M00055736D:D11	ES 175	642263	1672.O15.gz43_262079
M00055737B:A03	ES 175	640266	1672.O20.gz43_262159
M00055738B:H11	ES 175	100821	1672.P13.gz43_262048
M00055738C:A12	ES 175	647556	1672.P14.gz43_262064
M00055738C:C02	ES 175	647906	1672.P15.gz43_262080
M00055738D:G08	ES 175	645085	1672.P20.gz43_262160
M00055739A:B02	ES 175	550049	1672.P21.gz43_262176

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055739A:B04	ES 175	608540	1672.P22.gz43_262192
M00055739A:C09	ES 175	558301	1681.A01.gz43_296936
M00055739B:B06	ES 175	468613	1681.A03.gz43_296968
M00055739B:D09	ES 175	644836	1681.A04.gz43_296984
M00055739B:H08	ES 175	568467	1681.A08.gz43_297048
M00055739C:D11	ES 175	648481	1681.A10.gz43_297080
M00055739D:B12	ES 175	644684	1681.A13.gz43_297128
M00055739D:C03	ES 175	463815	1681.A14.gz43_297144
M00055739D:E04	ES 175	644919	1681.A16.gz43_297176
M00055740A:B03	ES 175	462245	1681.A19.gz43_297224
M00055740B:C06	ES 175	643142	1681.A21.gz43_297256
M00055740B:F09	ES 175	463824	1681.A24.gz43_297304
M00055740C:A07	ES 175	648905	1681.B03.gz43_296969
M00055740C:E06	ES 175	644937	1681.B04.gz43_296985
M00055740D:G12	ES 175	150839	1681.B10.gz43_297081
M00055741A:D09	ES 175	640504	1681.B13.gz43_297129
M00055741B:B12	ES 175	640997	1681.B15.gz43_297161
M00055741C:A09	ES 175	526459	1681.B18.gz43_297209
M00055741D:H01	ES 175	548920	1681.C01.gz43_296938
M00055742B:H06	ES 175	645147	1681.C08.gz43_297050
M00055742C:A07	ES 175	640306	1681.C10.gz43_297082
M00055742C:C01	ES 175	419479	1681.C11.gz43_297098
M00055742D:H03	ES 175	413621	1681.C16.gz43_297178
M00055743B:E01	ES 175	389377	1681.C24.gz43_297306
M00055743C:C01	ES 175	508755	1681.D02.gz43_296955
M00055743C:D12	ES 175	463951	1681.D05.gz43_297003
M00055743D:D04	ES 175	649427	1681.D09.gz43_297067
M00055743D:E07	ES 175	448703	1681.D10.gz43_297083
M00055744A:B04	ES 175	642263	1681.D15.gz43_297163
M00055744B:B02	ES 175	640017	1681.D19.gz43_297227
M00055744B:C08	ES 175	218416	1681.D20.gz43_297243
M00055744C:D02	ES 175	642644	1681.E02.gz43_296956
M00055744D:A11	ES 175	447936	1681.E08.gz43_297052
M00055744D:F03	ES 175	645000	1681.E11.gz43_297100
M00055745A:H02	ES 175	453726	1681.E19.gz43_297228
M00055745B:H02	ES 175	470667	1681.E23.gz43_297292
M00055745C:A06	ES 175	468959	1681.E24.gz43_297308
M00055745C:G06	ES 175	552085	1681.F03.gz43_296973
M00055745D:F11	ES 175	556654	1681.F09.gz43_297069
M00055746A:C09	ES 175	644053	1681.F10.gz43_297085
M00055746C:F06	ES 175	587696	1681.F17.gz43_297197
M00055746C:F10	ES 175	471277	1681.F18.gz43_297213
M00055746C:G06	ES 175	644468	1681.F19.gz43_297229
M00055747C:E09	ES 175	529742	1681.G11.gz43_297102

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055748A:B03	ES 175	593343	1681.G19.gz43_297230
M00055748A:D07	ES 175	448251	1681.G21.gz43_297262
M00055748C:C07	ES 175	446925	1681.H03.gz43_296975
M00055748D:C03	ES 175	594040	1681.H09.gz43_297071
M00055749B:C10	ES 175	461917	1681.H17.gz43_297199
M00055749B:D12	ES 175	452504	1681.H18.gz43_297215
M00055749C:B03	ES 175	644105	1681.H19.gz43_297231
M00055749C:C04	ES 175	489040	1681.H20.gz43_297247
M00055749D:B07	ES 175	426366	1681.I01.gz43_296944
M00055749D:C01	ES 175	644105	1681.I02.gz43_296960
M00055749D:D06	ES 175	649356	1681.I03.gz43_296976
M00055749D:F12	ES 175	644342	1681.I04.gz43_296992
M00055750B:H01	ES 175	644510	1681.I17.gz43_297200
M00055750C:H10	ES 175	638943	1681.J01.gz43_296945
M00055750D:H06	ES 175	649763	1681.J05.gz43_297009
M00055751A:F06	ES 175	488432	1681.J09.gz43_297073
M00055752A:E10	ES 175	649702	1681.J20.gz43_297249
M00055752A:G10	ES 175	644479	1681.J23.gz43_297297
M00055752C:C06	ES 175	510724	1681.K03.gz43_296978
M00055752C:F06	ES 175	644345	1681.K05.gz43_297010
M00055752C:H07	ES 175	611927	1681.K07.gz43_297042
M00055752D:C01	ES 175	641144	1681.K09.gz43_297074
M00055752D:F01	ES 175	644342	1681.K10.gz43_297090
M00055753A:D04	ES 175	639703	1681.K16.gz43_297186
M00055753B:A02	ES 175	483042	1681.K18.gz43_297218
M00055753B:A06	ES 175	447485	1681.K19.gz43_297234
M00055753B:F10	ES 175	449438	1681.K22.gz43_297282
M00055753D:C06	ES 175	446676	1681.L03.gz43_296979
M00055754A:E04	ES 175	446355	1681.L08.gz43_297059
M00055754A:E07	ES 175	550223	1681.L09.gz43_297075
M00055754A:H06	ES 175	478833	1681.L11.gz43_297107
M00055755A:B11	ES 175	514838	1681.L18.gz43_297219
M00055755C:F12	ES 175	464171	1681.M08.gz43_297060
M00055755D:C09	ES 175	491544	1681.M09.gz43_297076
M00055756C:C03	ES 175	639750	1681.M16.gz43_297188
M00055756D:B05	ES 175	643941	1681.M20.gz43_297252
M00055756D:E05	ES 175	108479	1681.M21.gz43_297268
M00055757A:A07	ES 175	553675	1681.M24.gz43_297316
M00055757B:B07	ES 175	646552	1681.N06.gz43_297029
M00055757B:C04	ES 175	639420	1681.N07.gz43_297045
M00055757B:D06	ES 175	235194	1681.N09.gz43_297077
M00055757D:B05	ES 175	643984	1681.N18.gz43_297221
M00055758A:G02	ES 175	644461	1681.N21.gz43_297269
M00055758C:H10	ES 175	645603	1681.O01.gz43_296950

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055758D:E02	ES 175	640264	1681.O04.gz43_296998
M00055759A:B02	ES 175	492917	1681.O08.gz43_297062
M00055759A:E01	ES 175	295143	1681.O11.gz43_297110
M00055759C:C07	ES 175	453188	1681.O18.gz43_297222
M00055760A:E06	ES 175	453324	1681.O23.gz43_297302
M00055761A:E06	ES 175	451508	1681.P15.gz43_297175
M00055761B:F01	ES 175	646453	1681.P21.gz43_297271
M00055761B:F09	ES 175	641968	1681.P22.gz43_297287
M00055761D:C03	ES 175	648320	1682.A06.gz43_262305
M00055761D:H08	ES 175	488680	1682.A09.gz43_262353
M00055762B:B11	ES 175	639981	1682.A14.gz43_262433
M00055762C:B04	ES 175	643940	1682.A16.gz43_262465
M00055762C:E06	ES 175	494378	1682.A17.gz43_262481
M00055762C:H07	ES 175	466147	1682.A20.gz43_262529
M00055763A:H02	ES 175	649360	1682.B03.gz43_262258
M00055763B:D07	ES 175	550562	1682.B05.gz43_262290
M00055763B:E09	ES 175	644278	1682.B08.gz43_262338
M00055763C:A10	ES 175	462815	1682.B12.gz43_262402
M00055763C:G08	ES 175	642564	1682.B14.gz43_262434
M00055763D:B11	ES 175	562870	1682.B15.gz43_262450
M00055764A:F02	ES 175	621636	1682.B18.gz43_262498
M00055764B:F05	ES 175	462393	1682.B22.gz43_262562
M00055764C:C07	ES 175	644765	1682.B24.gz43_262594
M00055765A:A04	ES 175	524470	1682.C10.gz43_262371
M00055765A:B02	ES 175	584179	1682.C11.gz43_262387
M00055765A:C11	ES 175	642204	1682.C16.gz43_262467
M00055765A:G02	ES 175	629002	1682.C20.gz43_262531
M00055765D:E06	ES 175	642460	1682.D11.gz43_262388
M00055765D:F04	ES 175	644853	1682.D13.gz43_262420
M00055766A:A01	ES 175	462742	1682.D15.gz43_262452
M00055766A:D08	ES 175	641576	1682.D17.gz43_262484
M00055766A:E08	ES 175	639232	1682.D18.gz43_262500
M00055766A:H03	ES 175	558719	1682.D20.gz43_262532
M00055766B:B01	ES 175	447224	1682.D23.gz43_262580
M00055766B:E11	ES 175	637387	1682.E04.gz43_262277
M00055766B:H10	ES 175	642852	1682.E08.gz43_262341
M00055766C:C07	ES 175	464091	1682.E10.gz43_262373
M00055766C:C11	ES 175	448944	1682.E11.gz43_262389
M00055766C:E05	ES 175	447712	1682.E12.gz43_262405
M00055766C:G12	ES 175	451037	1682.E15.gz43_262453
M00055766D:C05	ES 175	562021	1682.E18.gz43_262501
M00055766D:D05	ES 175	50351	1682.E20.gz43_262533
M00055766D:F09	ES 175	560393	1682.E24.gz43_262597
M00055767A:D10	ES 175	634660	1682.F04.gz43_262278



Table 13

CloneID	ES No	ClusterID	SequenceName
M00055767B:D02	ES 175	642082	1682.F11.gz43_262390
M00055767D:A12	ES 175	642082	1682.F17.gz43_262486
M00055767D:E07	ES 175	642417	1682.F20.gz43_262534
M00055767D:F04	ES 175	546740	1682.F21.gz43_262550
M00055768A:B05	ES 175	648996	1682.F24.gz43_262598
M00055768B:H12	ES 175	541499	1682.G13.gz43_262423
M00055768D:G02	ES 175	555140	1682.G22.gz43_262567
M00055770A:F01	ES 175	640997	1682.G24.gz43_262599
M00055770A:G08	ES 175	644173	1682.H02.gz43_262248
M00055770A:H11	ES 175	530238	1682.H03.gz43_262264
M00055770B:D06	ES 175	446757	1682.H06.gz43_262312
M00055770B:F06	ES 175	642474	1682.H07.gz43_262328
M00055770C:A02	ES 175	551167	1682.H08.gz43_262344
M00055770C:D01	ES 175	234606	1682.H09.gz43_262360
M00055770C:H11	ES 175	562876	1682.H12.gz43_262408
M00055770D:E10	ES 175	464510	1682.H19.gz43_262520
M00055771A:A11	ES 175	557797	1682.H22.gz43_262568
M00055771B:G05	ES 175	471268	1682.I10.gz43_262377
M00055771C:A11	ES 175	453079	1682.I12.gz43_262409
M00055771C:D09	ES 175	509410	1682.I13.gz43_262425
M00055771C:F05	ES 175	642604	1682.I15.gz43_262457
M00055772A:C10	ES 175	642036	1682.I24.gz43_262601
M00055772A:E12	ES 175	648588	1682.J01.gz43_262234
M00055772A:H08	ES 175	642791	1682.J04.gz43_262282
M00055772C:B09	ES 175	452503	1682.J08.gz43_262346
M00055772C:E11	ES 175	463951	1682.J10.gz43_262378
M00055772C:G08	ES 175	138470	1682.J12.gz43_262410
M00055772D:C10	ES 175	641563	1682.J15.gz43_262458
M00055772D:D03	ES 175	517912	1682.J16.gz43_262474
M00055772D:F10	ES 175	450553	1682.J18.gz43_262506
M00055772D:F11	ES 175	642558	1682.J19.gz43_262522
M00055772D:H04	ES 175	466971	1682.J20.gz43_262538
M00055773A:F05	ES 175	644451	1682.J22.gz43_262570
M00055773B:A07	ES 175	644914	1682.J24.gz43_262602
M00055773C:C09	ES 175	446163	1682.K04.gz43_262283
M00055773C:D12	ES 175	650272	1682.K05.gz43_262299
M00055773C:H12	ES 175	454540	1682.K06.gz43_262315
M00055773D:G11	ES 175	642637	1682.K09.gz43_262363
M00055774A:D04	ES 175	449975	1682.K14.gz43_262443
M00055774B:F07	ES 175	647940	1682.K18.gz43_262507
M00055774B:H01	ES 175	641185	1682.K20.gz43_262539
M00055774C:D09	ES 175	640617	1682.K22.gz43_262571
M00055774D:A05	ES 175	642417	1682.L02.gz43_262252

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055774D:B07	ES 176	553380	1682.L03.gz43_262268
M00055774D:E02	ES 176	458979	1682.L06.gz43_262316
M00055775A:G09	ES 176	101499	1682.L12.gz43_262412
M00055775B:A06	ES 176	447206	1682.L16.gz43_262476
M00055775B:G02	ES 176	644240	1682.L20.gz43_262540
M00055775B:G04	ES 176	559662	1682.L21.gz43_262556
M00055775C:B02	ES 176	645327	1682.L24.gz43_262604
M00055775C:B10	ES 176	553877	1682.M02.gz43_262253
M00055775C:D08	ES 176	642265	1682.M03.gz43_262269
M00055775C:E10	ES 176	641056	1682.M04.gz43_262285
M00055778A:E09	ES 176	621635	1682.M16.gz43_262477
M00055778A:F09	ES 176	461835	1682.M18.gz43_262509
M00055778A:F12	ES 176	642564	1682.M19.gz43_262525
M00055778A:G02	ES 176	509027	1682.M20.gz43_262541
M00055778B:C03	ES 176	645036	1682.M22.gz43_262573
M00055778B:E01	ES 176	458425	1682.M24.gz43_262605
M00055778C:D09	ES 176	494767	1682.N06.gz43_262318
M00055778D:A03	ES 176	642095	1682.N11.gz43_262398
M00055778D:C03	ES 176	639829	1682.N12.gz43_262414
M00055779A:B06	ES 176	642166	1682.N15.gz43_262462
M00055779A:H05	ES 176	480035	1682.N20.gz43_262542
M00055779B:F06	ES 176	556476	1682.N24.gz43_262606
M00055780A:C04	ES 176	89082	1682.O13.gz43_262431
M00055780A:C06	ES 176	561558	1682.O14.gz43_262447
M00055780A:E01	ES 176	650451	1682.O15.gz43_262463
M00055780A:E03	ES 176	642491	1682.O16.gz43_262479
M00055780A:E11	ES 176	450211	1682.O17.gz43_262495
M00055780A:F07	ES 176	641496	1682.O18.gz43_262511
M00055780A:G04	ES 176	453090	1682.O20.gz43_262543
M00055780C:E02	ES 176	641174	1682.P06.gz43_262320
M00055780C:E10	ES 176	502614	1682.P07.gz43_262336
M00055780D:D09	ES 176	642332	1682.P12.gz43_262416
M00055780D:F08	ES 176	453091	1682.P13.gz43_262432
M00055781A:B04	ES 176	642147	1682.P19.gz43_262528
M00055782B:C08	ES 176	643230	1683.A19.gz43_262897
M00055782C:H01	ES 176	459064	1683.B06.gz43_262690
M00055782D:H01	ES 176	649883	1683.B11.gz43_262770
M00055783A:C06	ES 176	642184	1683.B14.gz43_262818
M00055783A:F03	ES 176	644486	1683.B18.gz43_262882
M00055783B:A04	ES 176	523590	1683.B20.gz43_262914
M00055783C:A05	ES 176	506285	1683.C01.gz43_262611
M00055783D:B02	ES 176	497971	1683.C05.gz43_262675
M00055784A:B07	ES 176	140909	1683.C12.gz43_262787
M00055784A:D05	ES 176	456626	1683.C16.gz43_262851

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055784A:G10	ES 176	450384	1683.C19.gz43_262899
M00055784C:H02	ES 176	675768	1683.D03.gz43_262644
M00055784D:E03	ES 176	457847	1683.D05.gz43_262676
M00055785A:H08	ES 176	549434	1683.D09.gz43_262740
M00055785B:B06	ES 176	650076	1683.D12.gz43_262788
M00055785D:C06	ES 176	672601	1683.E01.gz43_262613
M00055786D:E10	ES 176	461990	1683.E19.gz43_262901
M00055787B:E02	ES 176	541209	1683.F03.gz43_262646
M00055787B:F10	ES 176	648905	1683.F04.gz43_262662
M00055787C:D09	ES 176	643350	1683.F10.gz43_262758
M00055787C:E12	ES 176	449836	1683.F12.gz43_262790
M00055787D:B07	ES 176	642318	1683.F16.gz43_262854
M00055789C:C12	ES 176	640799	1683.G23.gz43_262967
M00055789C:F10	ES 176	463290	1683.H01.gz43_262616
M00055789D:B04	ES 176	642146	1683.H03.gz43_262648
M00055789D:C06	ES 176	621635	1683.H04.gz43_262664
M00055790B:A08	ES 176	638962	1683.H14.gz43_262824
M00055790B:D05	ES 176	553546	1683.H18.gz43_262888
M00055790C:C02	ES 176	415950	1683.H22.gz43_262952
M00055790D:G10	ES 176	467306	1683.I04.gz43_262665
M00055791B:E02	ES 176	510545	1683.I11.gz43_262777
M00055791C:A02	ES 176	396191	1683.I15.gz43_262841
M00055792B:D08	ES 176	396149	1683.J14.gz43_262826
M00055793A:H09	ES 176	554117	1683.K06.gz43_262699
M00055793B:B06	ES 176	641919	1683.K08.gz43_262731
M00055794A:D08	ES 176	605761	1683.L08.gz43_262732
M00055794B:F04	ES 176	561718	1683.L17.gz43_262876
M00055794C:D10	ES 176	457396	1683.L21.gz43_262940
M00055795A:F09	ES 176	446595	1683.M09.gz43_262749
M00055795A:F12	ES 176	454485	1683.M10.gz43_262765
M00055795B:F09	ES 176	641700	1683.M15.gz43_262845
M00055795C:B10	ES 176	388085	1683.M20.gz43_262925
M00055795D:E09	ES 176	645508	1683.N05.gz43_262686
M00055795D:F08	ES 176	450218	1683.N06.gz43_262702
M00055795D:H08	ES 176	77144	1683.N11.gz43_262782
M00055796A:A08	ES 176	437580	1683.N15.gz43_262846
M00055796B:G05	ES 176	644047	1683.O05.gz43_262687
M00055796C:E11	ES 176	647639	1683.O10.gz43_262767
M00055796D:E06	ES 176	553979	1683.O16.gz43_262863
M00055796D:E10	ES 176	640525	1683.O17.gz43_262879
M00055797B:A11	ES 176	417617	1683.O23.gz43_262975
M00055797B:B04	ES 176	639807	1683.O24.gz43_262991
M00055797C:F08	ES 176	517224	1683.P09.gz43_262752
M00055798B:D12	ES 176	418340	1684.A04.gz43_263041

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055798B:F02	ES 176	644915	1684.A05.gz43_263057
M00055798B:G04	ES 176	645560	1684.A06.gz43_263073
M00055798D:A10	ES 176	455028	1684.A10.gz43_263137
M00055798D:H10	ES 176	483726	1684.A13.gz43_263185
M00055799B:G02	ES 176	674574	1684.A23.gz43_263345
M00055799C:D09	ES 176	645700	1684.A24.gz43_263361
M00055799D:F11	ES 176	640334	1684.B06.gz43_263074
M00055800A:F01	ES 176	462247	1684.B14.gz43_263202
M00055800A:F02	ES 176	490414	1684.B15.gz43_263218
M00055800C:E11	ES 176	640537	1684.B22.gz43_263330
M00055800D:B03	ES 176	462249	1684.C04.gz43_263043
M00055801D:E06	ES 176	564382	1684.C23.gz43_263347
M00055802A:C03	ES 176	494767	1684.D06.gz43_263076
M00055802B:H03	ES 176	486134	1684.D17.gz43_263252
M00055802C:E12	ES 176	643991	1684.D22.gz43_263332
M00055803A:C06	ES 176	513238	1684.E06.gz43_263077
M00055803A:F03	ES 176	455405	1684.E10.gz43_263141
M00055803A:G08	ES 176	642653	1684.E11.gz43_263157
M00055803B:A11	ES 176	530774	1684.E13.gz43_263189
M00055803B:E10	ES 176	557344	1684.E18.gz43_263269
M00055804B:C02	ES 176	639194	1684.F18.gz43_263270
M00055804D:F02	ES 176	463821	1684.G01.gz43_262999
M00055805A:A02	ES 176	640222	1684.G05.gz43_263063
M00055805A:C11	ES 176	641059	1684.G06.gz43_263079
M00055805B:C08	ES 176	642198	1684.G12.gz43_263175
M00055805C:D10	ES 176	630259	1684.G17.gz43_263255
M00055805D:C11	ES 176	640617	1684.G21.gz43_263319
M00055805D:H01	ES 176	529325	1684.G23.gz43_263351
M00055806B:B10	ES 176	644314	1684.H08.gz43_263112
M00055806B:D04	ES 176	464040	1684.H10.gz43_263144
M00055806C:D07	ES 176	496051	1684.H13.gz43_263192
M00055806C:E09	ES 176	375814	1684.H14.gz43_263208
M00055806C:G01	ES 176	549616	1684.H17.gz43_263256
M00055806D:H03	ES 176	450252	1684.H23.gz43_263352
M00055806D:H06	ES 176	640520	1684.H24.gz43_263368
M00055807A:B10	ES 176	32812	1684.I03.gz43_263033
M00055807B:F05	ES 176	520320	1684.I12.gz43_263177
M00055807B:G10	ES 176	446789	1684.I14.gz43_263209
M00055807C:F05	ES 176	639441	1684.I17.gz43_263257
M00055807D:C04	ES 176	470602	1684.I21.gz43_263321
M00055808A:C06	ES 176	450741	1684.J05.gz43_263066
M00055808B:A04	ES 176	650782	1684.J08.gz43_263114
M00055808B:H07	ES 176	210839	1684.J14.gz43_263210
M00055808D:C12	ES 176	460517	1684.J20.gz43_263306

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055808D:F09	ES 176	520320	1684.J24.gz43_263370
M00055809A:B10	ES 176	550370	1684.K05.gz43_263067
M00055809C:D01	ES 176	644901	1684.K17.gz43_263259
M00055809C:E11	ES 176	454772	1684.K19.gz43_263291
M00055809C:H10	ES 176	640479	1684.K22.gz43_263339
M00055810A:H03	ES 176	413277	1684.L06.gz43_263084
M00055810D:G04	ES 176	649995	1684.L19.gz43_263292
M00055811B:A03	ES 176	455665	1684.L23.gz43_263356
M00055811C:A01	ES 176	517327	1684.M01.gz43_263005
M00055811C:D12	ES 176	645015	1684.M03.gz43_263037
M00055811D:C02	ES 176	650231	1684.M07.gz43_263101
M00055811D:C12	ES 176	554742	1684.M09.gz43_263133
M00055811D:E01	ES 176	452828	1684.M10.gz43_263149
M00055812A:E01	ES 176	503491	1684.M15.gz43_263229
M00055812B:F03	ES 176	466016	1684.M19.gz43_263293
M00055812C:B07	ES 176	648752	1684.M24.gz43_263373
M00055812D:E03	ES 176	550604	1684.N09.gz43_263134
M00055813A:D10	ES 176	644147	1684.N12.gz43_263182
M00055813C:E03	ES 176	551683	1684.N17.gz43_263262
M00055813D:B12	ES 176	494271	1684.N19.gz43_263294
M00055814A:F02	ES 176	528134	1684.O01.gz43_263007
M00055814C:C07	ES 176	647336	1684.O11.gz43_263167
M00055815A:H12	ES 176	642850	1684.O24.gz43_263375
M00055815C:B03	ES 176	642099	1684.P04.gz43_263056
M00055815C:G05	ES 176	648221	1684.P08.gz43_263120
M00055815D:A11	ES 176	642962	1684.P09.gz43_263136
M00055815D:B02	ES 176	447015	1684.P10.gz43_263152
M00055815D:B03	ES 176	549640	1684.P11.gz43_263168
M00055816A:C04	ES 176	649035	1684.P17.gz43_263264
M00055816B:B07	ES 176	564854	1684.P23.gz43_263360
M00055816D:A10	ES 176	363172	1693.A07.gz43_213787
M00055816D:B11	ES 176	492242	1693.A09.gz43_213819
M00055816D:E10	ES 176	452863	1693.A13.gz43_213883
M00055817A:E05	ES 176	643397	1693.A17.gz43_213947
M00055817A:H07	ES 176	648580	1693.A19.gz43_213979
M00055817B:C04	ES 176	449542	1693.A23.gz43_214043
M00055818B:H03	ES 176	638837	1693.C10.gz43_213837
M00055819A:A06	ES 176	475624	1693.C23.gz43_214045
M00055819A:B10	ES 176	559854	1693.D01.gz43_213694
M00055822C:D09	ES 176	451966	1693.F18.gz43_213968
M00055823B:F02	ES 176	674526	1693.G08.gz43_213809
M00055825B:C11	ES 176	645155	1693.H03.gz43_213730
M00055825B:E03	ES 176	650204	1693.H04.gz43_213746
M00055825B:F09	ES 176	643054	1693.H06.gz43_213778

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055825D:A03	ES 176	642962	1693.H13.gz43_213890
M00055825D:D11	ES 176	551681	1693.H20.gz43_214002
M00055826A:G04	ES 176	640464	1693.I06.gz43_213779
M00055826B:G07	ES 176	645746	1693.I13.gz43_213891
M00055826C:G06	ES 176	650487	1693.I19.gz43_213987
M00055827A:A12	ES 176	650579	1693.J01.gz43_213700
M00055827D:A01	ES 176	455716	1693.J19.gz43_213988
M00055827D:C02	ES 176	556286	1693.J22.gz43_214036
M00055827D:G11	ES 176	583915	1693.K03.gz43_213733
M00055828A:H10	ES 176	647425	1693.K07.gz43_213797
M00055828B:E10	ES 176	517280	1693.K10.gz43_213845
M00055829C:A07	ES 176	648567	1693.L02.gz43_213718
M00055829D:H10	ES 176	645146	1693.L15.gz43_213926
M00055830A:G10	ES 176	645073	1693.L17.gz43_213958
M00055830C:H10	ES 176	451134	1693.M06.gz43_213783
M00055831A:C06	ES 176	644781	1693.M15.gz43_213927
M00055831B:C04	ES 177	517237	1693.M23.gz43_214055
M00055832A:A08	ES 177	481864	1693.N08.gz43_213816
M00055832C:H09	ES 177	648328	1693.N19.gz43_213992
M00055833D:F11	ES 177	650912	1693.O14.gz43_213913
M00055834B:C11	ES 177	557741	1693.O20.gz43_214009
M00055835C:F08	ES 177	642054	1693.P21.gz43_214026
M00055836A:B12	ES 177	645149	1694.A05.gz43_214139
M00055836C:D01	ES 177	452735	1694.A10.gz43_214219
M00055837A:B08	ES 177	447597	1694.A15.gz43_214299
M00055837A:D09	ES 177	644210	1694.A16.gz43_214315
M00055837A:F02	ES 177	489249	1694.A18.gz43_214347
M00055837A:H08	ES 177	645289	1694.A19.gz43_214363
M00055837B:E07	ES 177	644987	1694.A23.gz43_214427
M00055837D:D08	ES 177	642253	1694.B09.gz43_214204
M00055837D:G10	ES 177	504944	1694.B11.gz43_214236
M00055838A:A03	ES 177	643800	1694.B12.gz43_214252
M00055838A:B02	ES 177	448450	1694.B13.gz43_214268
M00055838B:D06	ES 177	467901	1694.B15.gz43_214300
M00055838B:G12	ES 177	644417	1694.B16.gz43_214316
M00055838B:H04	ES 177	644494	1694.B17.gz43_214332
M00055838C:A08	ES 177	447002	1694.B18.gz43_214348
M00055838C:B08	ES 177	643948	1694.B19.gz43_214364
M00055839B:A10	ES 177	643804	1694.C13.gz43_214269
M00055839B:C07	ES 177	648039	1694.C15.gz43_214301
M00055839B:E07	ES 177	558890	1694.C18.gz43_214349
M00055839B:H09	ES 177	537586	1694.C19.gz43_214365
M00055839C:B11	ES 177	467521	1694.C22.gz43_214413

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055839C:D06	ES 177	645948	1694.C23.gz43_214429
M00055840A:G06	ES 177	553145	1694.D08.gz43_214190
M00055840B:B02	ES 177	522869	1694.D11.gz43_214238
M00055840C:D06	ES 177	640618	1694.D17.gz43_214334
M00055840C:H06	ES 177	644548	1694.D18.gz43_214350
M00055840D:B03	ES 177	643977	1694.D20.gz43_214382
M00055841B:F09	ES 177	485237	1694.E09.gz43_214207
M00055841B:H03	ES 177	503546	1694.E10.gz43_214223
M00055841C:A03	ES 177	643843	1694.E12.gz43_214255
M00055841C:D05	ES 177	607430	1694.E15.gz43_214303
M00055841C:D11	ES 177	599759	1694.E17.gz43_214335
M00055841C:H04	ES 177	140648	1694.E20.gz43_214383
M00055841D:C11	ES 177	650528	1694.E21.gz43_214399
M00055842B:A04	ES 177	642079	1694.F05.gz43_214144
M00055842B:D04	ES 177	644063	1694.F09.gz43_214208
M00055842C:A11	ES 177	644548	1694.F11.gz43_214240
M00055842C:C03	ES 177	506901	1694.F12.gz43_214256
M00055842D:C02	ES 177	645505	1694.F15.gz43_214304
M00055842D:D07	ES 177	643809	1694.F17.gz43_214336
M00055842D:F07	ES 177	462557	1694.F19.gz43_214368
M00055843B:D10	ES 177	644212	1694.G04.gz43_214129
M00055843D:H01	ES 177	472119	1694.G15.gz43_214305
M00055844A:D03	ES 177	643825	1694.G18.gz43_214353
M00055844A:D07	ES 177	647577	1694.G19.gz43_214369
M00055844A:F11	ES 177	649068	1694.G20.gz43_214385
M00055844B:C12	ES 177	644075	1694.G24.gz43_214449
M00055844C:F01	ES 177	645290	1694.H06.gz43_214162
M00055844D:E11	ES 177	456728	1694.H10.gz43_214226
M00055844D:E12	ES 177	644314	1694.H11.gz43_214242
M00055844D:H09	ES 177	466697	1694.H16.gz43_214322
M00055845A:C03	ES 177	643999	1694.H19.gz43_214370
M00055845A:H10	ES 177	644569	1694.H21.gz43_214402
M00055845C:A11	ES 177	647448	1694.I05.gz43_214147
M00055845C:C12	ES 177	468222	1694.I08.gz43_214195
M00055845C:E02	ES 177	646420	1694.I10.gz43_214227
M00055845C:E05	ES 177	525456	1694.I11.gz43_214243
M00055845D:G11	ES 177	650276	1694.I16.gz43_214323
M00055846A:D07	ES 177	181364	1694.I18.gz43_214355
M00055846B:B12	ES 177	419751	1694.I23.gz43_214435
M00055846B:C12	ES 177	542282	1694.I24.gz43_214451
M00055846B:F11	ES 177	647191	1694.J01.gz43_214084
M00055846D:G08	ES 177	647383	1694.J12.gz43_214260
M00055846D:G09	ES 177	645681	1694.J13.gz43_214276
M00055846D:G11	ES 177	640171	1694.J14.gz43_214292

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055847B:G12	ES 177	651131	1694.J19.gz43_214372
M00055847C:A11	ES 177	646459	1694.J21.gz43_214404
M00055847C:C01	ES 177	646810	1694.J22.gz43_214420
M00055847C:H09	ES 177	452976	1694.J24.gz43_214452
M00055848A:E07	ES 177	645681	1694.K06.gz43_214165
M00055848B:C03	ES 177	647383	1694.K13.gz43_214277
M00055848C:A02	ES 177	645197	1694.K15.gz43_214309
M00055848C:G07	ES 177	558981	1694.K17.gz43_214341
M00055848C:H06	ES 177	646248	1694.K19.gz43_214373
M00055849C:G07	ES 177	547841	1694.L06.gz43_214166
M00055849D:B04	ES 177	450949	1694.L08.gz43_214198
M00055849D:H09	ES 177	469511	1694.L13.gz43_214278
M00055850C:D01	ES 177	608873	1694.L21.gz43_214406
M00055850C:G05	ES 177	647318	1694.L22.gz43_214422
M00055851A:C03	ES 177	466265	1694.M06.gz43_214167
M00055851A:C09	ES 177	649842	1694.M07.gz43_214183
M00055851A:G11	ES 177	97507	1694.M12.gz43_214263
M00055851A:H10	ES 177	647522	1694.M14.gz43_214295
M00055851B:B09	ES 177	562229	1694.M16.gz43_214327
M00055851B:G02	ES 177	639295	1694.M18.gz43_214359
M00055851B:G10	ES 177	425923	1694.M19.gz43_214375
M00055851C:F12	ES 177	643594	1694.M23.gz43_214439
M00055851C:H05	ES 177	472801	1694.M24.gz43_214455
M00055852A:C12	ES 177	639341	1694.N09.gz43_214216
M00055852B:F10	ES 177	562813	1694.N12.gz43_214264
M00055852B:G09	ES 177	642293	1694.N14.gz43_214296
M00055852B:H04	ES 177	457661	1694.N16.gz43_214328
M00055852D:B11	ES 177	644708	1694.N20.gz43_214392
M00055852D:G12	ES 177	649611	1694.N21.gz43_214408
M00055853B:H06	ES 177	647578	1694.O04.gz43_214137
M00055853C:C12	ES 177	603388	1694.O08.gz43_214201
M00055853C:H03	ES 177	647577	1694.O10.gz43_214233
M00055853D:A07	ES 177	650492	1694.O11.gz43_214249
M00055853D:B04	ES 177	643130	1694.O13.gz43_214281
M00055853D:C07	ES 177	650217	1694.O15.gz43_214313
M00055854A:B07	ES 177	592122	1694.O17.gz43_214345
M00055854A:D01	ES 177	639510	1694.O19.gz43_214377
M00055854A:E03	ES 177	645145	1694.O21.gz43_214409
M00055854A:E04	ES 177	638854	1694.O22.gz43_214425
M00055854C:C07	ES 177	549624	1694.P04.gz43_214138
M00055854C:E03	ES 177	570939	1694.P05.gz43_214154
M00055854C:H11	ES 177	471364	1694.P09.gz43_214218
M00055855A:B11	ES 177	404816	1694.P14.gz43_214298
M00055855A:G05	ES 177	462659	1694.P16.gz43_214330



Table 13

CloneID	ES No	ClusterID	SequenceName
M00055855B:B11	ES 177	643909	1694.P20.gz43_214394
M00055855B:D12	ES 177	465576	1694.P21.gz43_214410
M00055855C:F11	ES 177	603388	1694.P23.gz43_214442
M00055855D:D12	ES 177	509027	1695.A04.gz43_214911
M00055855D:G08	ES 177	644442	1695.A07.gz43_214959
M00055856A:C06	ES 177	564854	1695.A08.gz43_214975
M00055856A:D12	ES 177	644149	1695.A09.gz43_214991
M00055856C:F07	ES 177	550267	1695.A20.gz43_215167
M00055857C:D09	ES 177	646372	1695.B08.gz43_214976
M00055858A:G07	ES 177	642070	1695.B24.gz43_215232
M00055860D:E04	ES 177	596882	1695.D05.gz43_214930
M00055861B:F04	ES 177	645848	1695.D08.gz43_214978
M00055861C:G03	ES 177	645538	1695.D13.gz43_215058
M00055862A:C01	ES 177	140224	1695.D21.gz43_215186
M00055862D:B02	ES 177	640147	1695.E09.gz43_214995
M00055862D:D06	ES 177	449500	1695.E11.gz43_215027
M00055863B:C07	ES 177	644030	1695.E20.gz43_215171
M00055863D:D09	ES 177	644047	1695.F07.gz43_214964
M00055864A:C09	ES 177	644047	1695.F13.gz43_215060
M00055864A:E11	ES 177	650773	1695.F14.gz43_215076
M00055864B:C09	ES 177	561877	1695.F18.gz43_215140
M00055865C:G11	ES 177	649660	1695.G23.gz43_215221
M00055865C:H06	ES 177	650517	1695.G24.gz43_215237
M00055866A:G10	ES 177	397399	1695.H07.gz43_214966
M00055866C:G09	ES 177	644435	1695.H17.gz43_215126
M00055866C:H06	ES 177	644410	1695.H18.gz43_215142
M00055867A:B02	ES 177	645288	1695.H23.gz43_215222
M00055868B:B04	ES 177	649436	1695.I16.gz43_215111
M00055868C:F02	ES 177	562059	1695.I24.gz43_215239
M00055868D:D08	ES 177	469437	1695.J05.gz43_214936
M00055869C:G06	ES 177	449936	1695.J14.gz43_215080
M00055869D:A07	ES 177	642411	1695.J16.gz43_215112
M00055870B:D04	ES 177	649846	1695.J24.gz43_215240
M00055871A:H06	ES 177	524261	1695.K09.gz43_215001
M00055871B:B03	ES 177	648819	1695.K11.gz43_215033
M00055871C:C07	ES 177	643099	1695.K21.gz43_215193
M00055871C:C10	ES 177	644801	1695.K22.gz43_215209
M00055872A:C08	ES 177	644755	1695.L11.gz43_215034
M00055872A:D08	ES 177	644830	1695.L12.gz43_215050
M00055872A:E05	ES 177	505858	1695.L13.gz43_215066
M00055872A:E11	ES 177	640534	1695.L15.gz43_215098
M00055872D:D12	ES 177	447035	1695.M08.gz43_214987
M00055873A:E03	ES 177	643451	1695.M16.gz43_215115
M00055873D:E04	ES 177	643488	1695.N10.gz43_215020

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055874A:F06	ES 177	645497	1695.N18.gz43_215148
M00055875A:G05	ES 177	554646	1695.O14.gz43_215085
M00055875B:E09	ES 177	646633	1695.P03.gz43_214910
M00055875C:C07	ES 177	516512	1695.P11.gz43_215038
M00055875D:A07	ES 177	640136	1695.P20.gz43_215182
M00055875D:D01	ES 177	643333	1695.P22.gz43_215214
M00055875D:H10	ES 177	650179	1696.A01.gz43_215247
M00055877A:H04	ES 177	645638	1696.A07.gz43_215343
M00055877B:B05	ES 177	484991	1696.A09.gz43_215375
M00055877D:C05	ES 177	643233	1696.A21.gz43_215567
M00055878C:C02	ES 177	593715	1696.B16.gz43_215488
M00055879A:D04	ES 177	643934	1696.C11.gz43_215409
M00055879A:G03	ES 177	450001	1696.C12.gz43_215425
M00055880B:A04	ES 177	642911	1696.D03.gz43_215282
M00055880B:A06	ES 177	447807	1696.D04.gz43_215298
M00055880C:F07	ES 177	645215	1696.D15.gz43_215474
M00055881A:A08	ES 177	447221	1696.E05.gz43_215315
M00055881A:E10	ES 177	479868	1696.E12.gz43_215427
M00055881A:G07	ES 177	446225	1696.E13.gz43_215443
M00055881D:A02	ES 177	648063	1696.E22.gz43_215587
M00055882C:A06	ES 177	450559	1696.F14.gz43_215460
M00055882D:B02	ES 177	640400	1696.F21.gz43_215572
M00055883A:C02	ES 177	179760	1696.G05.gz43_215317
M00055883A:C10	ES 177	459274	1696.G06.gz43_215333
M00055883A:H01	ES 177	643745	1696.G11.gz43_215413
M00055883D:B06	ES 177	644468	1696.G21.gz43_215573
M00055884B:F10	ES 177	451670	1696.H17.gz43_215510
M00055884B:H07	ES 177	552628	1696.H18.gz43_215526
M00055884C:B07	ES 177	643046	1696.H21.gz43_215574
M00055884D:F07	ES 177	345761	1696.I06.gz43_215335
M00055885A:D05	ES 177	558222	1696.I11.gz43_215415
M00055885B:A11	ES 177	555172	1696.I15.gz43_215479
M00055885B:B04	ES 178	586992	1696.I16.gz43_215495
M00055885C:B07	ES 178	552201	1696.J01.gz43_215256
M00055886A:B06	ES 178	643126	1696.J12.gz43_215432
M00055886D:E11	ES 178	557792	1696.K11.gz43_215417
M00055887A:F07	ES 178	644099	1696.K18.gz43_215529
M00055887D:C11	ES 178	643248	1696.L14.gz43_215466
M00055888C:F07	ES 178	639256	1696.M04.gz43_215307
M00055888C:G09	ES 178	640356	1696.M06.gz43_215339
M00055889B:E12	ES 178	570248	1696.M23.gz43_215611
M00055890A:A06	ES 178	464171	1696.N11.gz43_215420
M00055890A:D01	ES 178	549114	1696.N14.gz43_215468

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055890A:G12	ES 178	649068	1696.N21.gz43_215580
M00055890A:H11	ES 178	643724	1696.N23.gz43_215612
M00055891B:F09	ES 178	643513	1696.P02.gz43_215278
M00055892A:F04	ES 178	649027	1696.P23.gz43_215614
M00055892B:D02	ES 178	643366	1696.P24.gz43_215630
M00055893B:C05	ES 178	650476	1705.A11.gz43_215791
M00055894A:H08	ES 178	374340	1705.A22.gz43_215967
M00055894B:E09	ES 178	394373	1705.B03.gz43_215664
M00055896A:G01	ES 178	648576	1705.B11.gz43_215792
M00055896B:C06	ES 178	643948	1705.B14.gz43_215840
M00055896B:H04	ES 178	640762	1705.B18.gz43_215904
M00055896C:H10	ES 178	553951	1705.B23.gz43_215984
M00055896D:G10	ES 178	557361	1705.C03.gz43_215665
M00055898B:E07	ES 178	485237	1705.C11.gz43_215793
M00055899A:B03	ES 178	645844	1705.C18.gz43_215905
M00055899C:H01	ES 178	474577	1705.D05.gz43_215698
M00055900A:F08	ES 178	644390	1705.D16.gz43_215874
M00055900B:E12	ES 178	446728	1705.D20.gz43_215938
M00055900D:D03	ES 178	526575	1705.E01.gz43_215635
M00055901B:A02	ES 178	647522	1705.E10.gz43_215779
M00055901C:A01	ES 178	553720	1705.E16.gz43_215875
M00055901C:C10	ES 178	641087	1705.E18.gz43_215907
M00055901C:D04	ES 178	642940	1705.E19.gz43_215923
M00055902A:H11	ES 178	643513	1705.F06.gz43_215716
M00055902D:A07	ES 178	557947	1705.F14.gz43_215844
M00055902D:H10	ES 178	482163	1705.F18.gz43_215908
M00055903B:C10	ES 178	644063	1705.F24.gz43_216004
M00055903B:E05	ES 178	554166	1705.G03.gz43_215669
M00055904B:B01	ES 178	643914	1705.G12.gz43_215813
M00055904C:A07	ES 178	643809	1705.G15.gz43_215861
M00055904D:A06	ES 178	643808	1705.G18.gz43_215909
M00055905A:F11	ES 178	644354	1705.G24.gz43_216005
M00055905B:H01	ES 178	639194	1705.H06.gz43_215718
M00055905D:B06	ES 178	605596	1705.H13.gz43_215830
M00055905D:H02	ES 178	550242	1705.H17.gz43_215894
M00055906C:F03	ES 178	641562	1705.H23.gz43_215990
M00055906D:G03	ES 178	454720	1705.I06.gz43_215719
M00055907D:D06	ES 178	449994	1705.J06.gz43_215720
M00055908D:F09	ES 178	644364	1705.K04.gz43_215689
M00055909B:B12	ES 178	638869	1705.K10.gz43_215785
M00055909B:G10	ES 178	643089	1705.K16.gz43_215881
M00055909C:E08	ES 178	447326	1705.K20.gz43_215945
M00055909C:G09	ES 178	645781	1705.K21.gz43_215961
M00055909D:A09	ES 178	638919	1705.K22.gz43_215977

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055909D:E01	ES 178	89082	1705.K24.gz43_216009
M00055910B:B11	ES 178	642985	1705.L11.gz43_215802
M00055910B:H12	ES 178	639240	1705.L16.gz43_215882
M00055910C:G01	ES 178	468147	1705.L19.gz43_215930
M00055910C:G04	ES 178	685001	1705.L20.gz43_215946
M00055910D:A03	ES 178	643825	1705.L21.gz43_215962
M00055911B:E06	ES 178	644242	1705.M05.gz43_215707
M00055912A:F08	ES 178	557675	1705.M16.gz43_215883
M00055912B:E05	ES 178	648237	1705.M20.gz43_215947
M00055912C:C08	ES 178	640756	1705.M22.gz43_215979
M00055912D:F04	ES 178	644407	1705.N05.gz43_215708
M00055913A:G07	ES 178	649312	1705.N12.gz43_215820
M00055913B:D05	ES 178	644190	1705.N17.gz43_215900
M00055914A:A03	ES 178	449737	1705.O02.gz43_215661
M00055914C:D12	ES 178	643300	1705.O09.gz43_215773
M00055914C:G01	ES 178	644108	1705.O11.gz43_215805
M00055914C:G11	ES 178	641645	1705.O12.gz43_215821
M00055914D:A08	ES 178	564134	1705.O13.gz43_215837
M00055914D:G06	ES 178	553587	1705.O16.gz43_215885
M00055915A:A06	ES 178	639413	1705.O17.gz43_215901
M00055915B:D08	ES 178	447212	1705.O21.gz43_215965
M00055915C:B09	ES 178	643991	1705.O24.gz43_216013
M00055915D:A07	ES 178	640178	1705.P05.gz43_215710
M00055916A:E12	ES 178	644236	1705.P12.gz43_215822
M00055916B:C02	ES 178	649170	1705.P15.gz43_215870
M00055917B:D02	ES 178	642911	1706.A08.gz43_216139
M00055917C:F04	ES 178	549994	1706.A13.gz43_216219
M00055917D:E07	ES 178	644301	1706.A16.gz43_216267
M00055918A:F10	ES 178	645028	1706.A20.gz43_216331
M00055918B:B07	ES 178	643936	1706.A24.gz43_216395
M00055918B:B10	ES 178	459881	1706.B01.gz43_216028
M00055918B:F10	ES 178	557175	1706.B03.gz43_216060
M00055918C:C04	ES 178	651131	1706.B05.gz43_216092
M00055918C:E02	ES 178	642166	1706.B07.gz43_216124
M00055919A:A06	ES 178	647952	1706.B12.gz43_216204
M00055919B:H11	ES 178	562021	1706.B19.gz43_216316
M00055919D:H07	ES 178	644554	1706.C01.gz43_216029
M00055920A:H10	ES 178	640977	1706.C05.gz43_216093
M00055920B:F02	ES 178	644410	1706.C09.gz43_216157
M00055921A:E06	ES 178	188079	1706.C21.gz43_216349
M00055922A:F05	ES 178	465576	1706.D13.gz43_216222
M00055922A:G07	ES 178	650900	1706.D15.gz43_216254
M00055922B:A06	ES 178	447426	1706.D17.gz43_216286
M00055922B:G09	ES 178	649085	1706.D21.gz43_216350

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055922D:G10	ES 178	419009	1706.E06.gz43_216111
M00055923B:C07	ES 178	643170	1706.E10.gz43_216175
M00055924B:D02	ES 178	643627	1706.E22.gz43_216367
M00055924B:E12	ES 178	464129	1706.F01.gz43_216032
M00055924C:A09	ES 178	641484	1706.F03.gz43_216064
M00055925A:C04	ES 178	450840	1706.F11.gz43_216192
M00055925B:D09	ES 178	639154	1706.F20.gz43_216336
M00055925B:D10	ES 178	643332	1706.F21.gz43_216352
M00055926B:A05	ES 178	447123	1706.G12.gz43_216209
M00055926C:A11	ES 178	207552	1706.G18.gz43_216305
M00055927B:D06	ES 178	642308	1706.H05.gz43_216098
M00055927D:E11	ES 178	643239	1706.H10.gz43_216178
M00055928A:C06	ES 178	639038	1706.H15.gz43_216258
M00055928A:E11	ES 178	610893	1706.H17.gz43_216290
M00055928B:E11	ES 178	643383	1706.H21.gz43_216354
M00055929A:C11	ES 178	649954	1706.I14.gz43_216243
M00055929B:E01	ES 178	462089	1706.I17.gz43_216291
M00055929D:F09	ES 178	649954	1706.I24.gz43_216403
M00055930A:G04	ES 178	644629	1706.J05.gz43_216100
M00055930C:D03	ES 178	650938	1706.J09.gz43_216164
M00055930C:F06	ES 178	639596	1706.J10.gz43_216180
M00055930C:H05	ES 178	556925	1706.J15.gz43_216260
M00055930D:B05	ES 178	447520	1706.J16.gz43_216276
M00055930D:B09	ES 178	613626	1706.J17.gz43_216292
M00055930D:F05	ES 178	513211	1706.J21.gz43_216356
M00055933A:E05	ES 178	638808	1706.L07.gz43_216134
M00055933B:B11	ES 178	605114	1706.L10.gz43_216182
M00055933B:G01	ES 178	650245	1706.L11.gz43_216198
M00055934C:E06	ES 178	446795	1706.M06.gz43_216119
M00055934D:H09	ES 178	650470	1706.M12.gz43_216215
M00055935B:H06	ES 178	479604	1706.M20.gz43_216343
M00055935C:E03	ES 178	640672	1706.M23.gz43_216391
M00055936C:B05	ES 178	646596	1706.N07.gz43_216136
M00055936C:D03	ES 178	648379	1706.N08.gz43_216152
M00055936D:F03	ES 178	456920	1706.N11.gz43_216200
M00055937A:F07	ES 178	645092	1706.N17.gz43_216296
M00055937C:C08	ES 178	641716	1706.N21.gz43_216360
M00055939A:B12	ES 178	644732	1706.P02.gz43_216058
M00055939B:A11	ES 178	639901	1706.P07.gz43_216138
M00055939D:D07	ES 178	559905	1706.P13.gz43_216234
M00055940B:A08	ES 178	649873	1706.P19.gz43_216330
M00055941B:A04	ES 178	524546	1707.A12.gz43_216604
M00055942B:H10	ES 178	646317	1707.B04.gz43_216477
M00055942D:A01	ES 178	648782	1707.B12.gz43_216605

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055942D:E05	ES 178	645809	1707.B16.gz43_216669
M00055943B:E01	ES 178	447805	1707.B24.gz43_216797
M00055945C:C02	ES 178	648588	1707.D13.gz43_216623
M00055945C:D09	ES 178	648555	1707.D14.gz43_216639
M00055945D:D01	ES 178	461363	1707.D17.gz43_216687
M00055945D:E08	ES 178	644720	1707.D18.gz43_216703
M00055947C:E09	ES 178	393599	1707.E20.gz43_216736
M00055949A:E09	ES 178	499693	1707.F02.gz43_216449
M00055949D:B07	ES 178	649549	1707.F06.gz43_216513
M00055951B:A07	ES 178	644983	1707.G03.gz43_216466
M00055952C:E08	ES 178	650935	1707.G21.gz43_216754
M00055953D:B08	ES 178	642105	1707.H10.gz43_216579
M00055954C:G07	ES 178	531529	1707.H19.gz43_216723
M00055954D:B04	ES 178	561777	1707.H22.gz43_216771
M00055955B:C06	ES 178	460245	1707.I08.gz43_216548
M00055955C:H05	ES 178	650370	1707.I14.gz43_216644
M00055956D:B01	ES 178	550237	1707.J02.gz43_216453
M00055956D:C11	ES 178	447224	1707.J04.gz43_216485
M00055957B:F11	ES 178	452316	1707.J14.gz43_216645
M00055957C:F05	ES 178	644568	1707.J18.gz43_216709
M00055958C:E03	ES 178	643968	1707.K05.gz43_216502
M00055958D:F02	ES 178	647185	1707.K10.gz43_216582
M00055961D:F06	ES 178	647312	1707.L18.gz43_216711
M00055963B:C02	ES 178	555210	1707.L22.gz43_216775
M00055965A:G06	ES 178	642653	1707.M24.gz43_216808
M00055965D:G01	ES 178	472101	1707.N12.gz43_216617
M00055966B:H09	ES 178	646190	1707.N18.gz43_216713
M00055966C:D03	ES 178	645508	1707.N20.gz43_216745
M00055967A:F11	ES 178	513619	1707.O07.gz43_216538
M00055967A:G01	ES 178	646061	1707.O08.gz43_216554
M00055967B:B12	ES 178	645273	1707.O09.gz43_216570
M00055967B:F07	ES 178	645900	1707.O13.gz43_216634
M00055967D:C05	ES 178	383609	1707.O23.gz43_216794
M00055968D:E03	ES 178	643162	1707.P18.gz43_216715
M00055969A:F02	ES 178	694643	1707.P24.gz43_216811
M00055969B:B05	ES 178	640672	1708.A04.gz43_216860
M00055969D:B08	ES 178	645289	1708.A11.gz43_216972
M00055969D:F08	ES 178	642955	1708.A12.gz43_216988
M00055970C:A05	ES 178	647058	1708.A21.gz43_217132
M00055970D:F09	ES 178	645894	1708.B10.gz43_216957
M00055971B:A11	ES 178	649082	1708.B14.gz43_217021
M00055972C:C09	ES 178	557852	1708.C06.gz43_216894
M00055972C:F02	ES 178	558052	1708.C07.gz43_216910
M00055973C:F10	ES 178	647211	1708.C24.gz43_217182

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055973D:H11	ES 178	452762	1708.D08.gz43_216927
M00055974D:B01	ES 178	645264	1708.D18.gz43_217087
M00055976A:D04	ES 178	645926	1708.E22.gz43_217152
M00055976B:F01	ES 178	647280	1708.F05.gz43_216881
M00055977A:G09	ES 178	647333	1708.F19.gz43_217105
M00055977B:F06	ES 179	643723	1708.F21.gz43_217137
M00055978A:H03	ES 179	642058	1708.G11.gz43_216978
M00055978B:F01	ES 179	484355	1708.G16.gz43_217058
M00055979B:G07	ES 179	640092	1708.H12.gz43_216995
M00055979C:B07	ES 179	640204	1708.H15.gz43_217043
M00055980A:H06	ES 179	647539	1708.H23.gz43_217171
M00055980B:B07	ES 179	647924	1708.I01.gz43_216820
M00055980C:G12	ES 179	644354	1708.I08.gz43_216932
M00055981D:B07	ES 179	650513	1708.J07.gz43_216917
M00055982A:G06	ES 179	646013	1708.J17.gz43_217077
M00055982C:A12	ES 179	650018	1708.J24.gz43_217189
M00055982C:H01	ES 179	644226	1708.K04.gz43_216870
M00055983C:C09	ES 179	451709	1708.K14.gz43_217030
M00055983D:A09	ES 179	477790	1708.K18.gz43_217094
M00055984A:F05	ES 179	645848	1708.K24.gz43_217190
M00055984D:E04	ES 179	645746	1708.L08.gz43_216935
M00055985A:B06	ES 179	645288	1708.L10.gz43_216967
M00055985B:C02	ES 179	645427	1708.L13.gz43_217015
M00055985B:G12	ES 179	646126	1708.L16.gz43_217063
M00055985D:E09	ES 179	641484	1708.M02.gz43_216840
M00055986A:F05	ES 179	647539	1708.M09.gz43_216952
M00055987B:F07	ES 179	465209	1708.N06.gz43_216905
M00055988A:A12	ES 179	640179	1708.N15.gz43_217049
M00055988A:E05	ES 179	639359	1708.N21.gz43_217145
M00055989A:C09	ES 179	560349	1708.O11.gz43_216986
M00055990A:F07	ES 179	645920	1708.P01.gz43_216827
M00055990D:B02	ES 179	558452	1708.P12.gz43_217003
M00055990D:G09	ES 179	582549	1708.P15.gz43_217051
M00055991A:D10	ES 179	649309	1708.P18.gz43_217099
M00055991A:H09	ES 179	450123	1708.P20.gz43_217131
M00055991C:H11	ES 179	646212	1708.P24.gz43_217195
M00055992A:D08	ES 179	645662	1717.A08.gz43_218513
M00055993A:E02	ES 179	643288	1717.A19.gz43_218689
M00055993D:F12	ES 179	649556	1717.B06.gz43_218482
M00055994A:G04	ES 179	603388	1717.B11.gz43_218562
M00055994B:B12	ES 179	651119	1717.B15.gz43_218626
M00055994C:E06	ES 179	642887	1717.B23.gz43_218754
M00055994C:F05	ES 179	639377	1717.B24.gz43_218770

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055995A:G09	ES 179	643808	1717.C14.gz43_218611
M00055995B:A02	ES 179	477521	1717.C15.gz43_218627
M00055995C:F05	ES 179	650534	1717.C20.gz43_218707
M00055996A:C10	ES 179	466277	1717.D02.gz43_218420
M00055996B:H04	ES 179	466271	1717.D08.gz43_218516
M00055996C:A02	ES 179	650018	1717.D09.gz43_218532
M00055996C:A08	ES 179	640645	1717.D10.gz43_218548
M00055996D:D07	ES 179	558856	1717.D13.gz43_218596
M00055996D:G02	ES 179	587106	1717.D15.gz43_218628
M00055997A:B08	ES 179	642000	1717.D19.gz43_218692
M00055997A:C08	ES 179	634365	1717.D20.gz43_218708
M00055997A:F04	ES 179	552846	1717.D23.gz43_218756
M00055997D:A11	ES 179	541214	1717.E11.gz43_218565
M00055998A:F06	ES 179	644990	1717.E20.gz43_218709
M00055998B:A04	ES 179	644612	1717.E22.gz43_218741
M00055998B:D06	ES 179	560860	1717.F01.gz43_218406
M00055998B:G03	ES 179	402100	1717.F03.gz43_218438
M00055998C:D04	ES 179	513888	1717.F05.gz43_218470
M00055998D:G05	ES 179	645076	1717.F18.gz43_218678
M00055999A:A04	ES 179	478025	1717.F19.gz43_218694
M00055999A:B07	ES 179	207530	1717.F20.gz43_218710
M00055999A:H10	ES 179	646387	1717.F22.gz43_218742
M00055999C:A01	ES 179	642881	1717.G04.gz43_218455
M00055999D:C05	ES 179	549889	1717.G12.gz43_218583
M00055999D:H04	ES 179	644210	1717.G17.gz43_218663
M00056000A:B02	ES 179	447822	1717.G19.gz43_218695
M00056000A:E11	ES 179	647443	1717.G22.gz43_218743
M00056000C:D09	ES 179	649259	1717.H08.gz43_218520
M00056001C:E09	ES 179	562221	1717.H20.gz43_218712
M00056001C:F07	ES 179	447556	1717.H21.gz43_218728
M00056001D:B06	ES 179	641736	1717.I03.gz43_218441
M00056001D:G12	ES 179	643971	1717.I05.gz43_218473
M00056002A:A03	ES 179	644611	1717.I06.gz43_218489
M00056002A:H06	ES 179	559400	1717.I09.gz43_218537
M00056002D:E09	ES 179	419443	1717.I15.gz43_218633
M00056003A:A08	ES 179	449261	1717.I17.gz43_218665
M00056003A:B07	ES 179	641580	1717.I19.gz43_218697
M00056003A:C01	ES 179	645197	1717.I20.gz43_218713
M00056003B:E11	ES 179	618670	1717.J02.gz43_218426
M00056003B:G11	ES 179	464498	1717.J03.gz43_218442
M00056003C:C09	ES 179	644824	1717.J05.gz43_218474
M00056003C:H10	ES 179	645162	1717.J07.gz43_218506
M00056004A:E12	ES 179	451469	1717.J13.gz43_218602
M00056004B:F04	ES 179	643498	1717.J17.gz43_218666



Table 13

CloneID	ES No	ClusterID	SequenceName
M00056004D:F03	ES 179	452775	1717.K03.gz43_218443
M00056004D:F12	ES 179	444454	1717.K04.gz43_218459
M00056005B:H08	ES 179	641167	1717.K20.gz43_218715
M00056005C:F11	ES 179	561836	1717.L03.gz43_218444
M00056005D:C04	ES 179	470462	1717.L07.gz43_218508
M00056005D:F12	ES 179	362177	1717.L10.gz43_218556
M00056006A:E04	ES 179	643440	1717.L15.gz43_218636
M00056006A:G09	ES 179	532307	1717.L18.gz43_218684
M00056006B:A10	ES 179	637977	1717.L19.gz43_218700
M00056006B:B05	ES 179	592941	1717.L20.gz43_218716
M00056006B:C12	ES 179	411885	1717.L24.gz43_218780
M00056006D:C06	ES 179	643239	1717.M06.gz43_218493
M00056006D:D05	ES 179	639940	1717.M07.gz43_218509
M00056006D:E03	ES 179	643477	1717.M10.gz43_218557
M00056006D:F05	ES 179	651083	1717.M11.gz43_218573
M00056007A:B02	ES 179	555736	1717.M16.gz43_218653
M00056007A:G07	ES 179	647194	1717.M22.gz43_218749
M00056007B:C10	ES 179	449713	1717.M24.gz43_218781
M00056007B:E08	ES 179	649701	1717.N03.gz43_218446
M00056007C:A03	ES 179	448418	1717.N05.gz43_218478
M00056007D:F07	ES 179	644022	1717.N13.gz43_218606
M00056007D:H12	ES 179	262760	1717.N14.gz43_218622
M00056008A:H03	ES 179	675319	1717.N17.gz43_218670
M00056008B:E04	ES 179	641283	1717.N21.gz43_218734
M00056008B:G01	ES 179	456627	1717.N24.gz43_218782
M00056008B:G05	ES 179	447802	1717.O02.gz43_218431
M00056008C:D04	ES 179	639178	1717.O04.gz43_218463
M00056008C:D08	ES 179	644030	1717.O05.gz43_218479
M00056008D:D02	ES 179	644612	1717.O13.gz43_218607
M00056008D:D03	ES 179	642260	1717.O14.gz43_218623
M00056009A:H08	ES 179	557895	1717.O18.gz43_218687
M00056009C:F09	ES 179	649860	1717.O23.gz43_218767
M00056009D:A02	ES 179	646143	1717.O24.gz43_218783
M00056009D:C12	ES 179	640709	1717.P01.gz43_218416
M00056010A:E05	ES 179	644972	1717.P05.gz43_218480
M00056011A:C11	ES 179	644949	1717.P13.gz43_218608
M00056011B:A06	ES 179	517274	1717.P17.gz43_218672
M00056011B:E10	ES 179	489426	1717.P19.gz43_218704
M00056011C:D04	ES 179	555172	1717.P22.gz43_218752
M00056013A:C09	ES 179	538808	1718.B12.gz43_218965
M00056013D:D07	ES 179	640181	1718.B21.gz43_219109
M00056016C:F11	ES 179	643744	1718.D04.gz43_218839
M00056016D:E02	ES 179	644967	1718.D07.gz43_218887
M00056017A:B08	ES 179	643975	1718.D09.gz43_218919

Table 13

CloneID	ES No	ClusterID	SequenceName
M00056019B:A01	ES 179	643510	1718.F02.gz43_218809
M00056020B:C09	ES 179	650348	1718.F23.gz43_219145
M00056020C:H03	ES 179	650391	1718.G06.gz43_218874
M00056020D:D03	ES 179	545509	1718.G08.gz43_218906
M00056021A:H06	ES 179	557344	1718.G17.gz43_219050
M00056021C:H08	ES 179	639629	1718.H03.gz43_218827
M00056023D:D08	ES 179	650749	1718.I21.gz43_219116
M00056026B:H01	ES 179	644982	1718.K18.gz43_219070
M00056028D:F06	ES 179	645883	1718.M11.gz43_218960
M00056029B:H03	ES 179	467057	1718.M20.gz43_219104
M00056029D:D08	ES 179	447659	1718.N06.gz43_218881
M00056031D:E06	ES 179	495942	1718.O14.gz43_219010
M00056032B:H08	ES 179	397399	1718.P04.gz43_218851
M00056033A:C11	ES 179	425455	1718.P13.gz43_218995
M00056033C:H09	ES 179	451993	1718.P24.gz43_219171
M00056033D:F06	ES 179	645973	1719.A03.gz43_219204
M00056033D:G07	ES 179	642198	1719.A04.gz43_219220
M00056034A:G10	ES 179	646048	1719.A10.gz43_219316
M00056034C:D07	ES 179	452325	1719.A17.gz43_219428
M00056034C:H09	ES 179	648390	1719.A21.gz43_219492
M00056034D:E09	ES 179	640559	1719.A23.gz43_219524
M00056035B:A04	ES 179	550376	1719.B03.gz43_219205
M00056035B:D11	ES 179	566745	1719.B06.gz43_219253
M00056035B:E10	ES 179	549786	1719.B07.gz43_219269
M00056035C:H11	ES 179	452504	1719.B15.gz43_219397
M00056035D:C08	ES 179	447645	1719.B17.gz43_219429
M00056035D:G10	ES 179	467597	1719.B21.gz43_219493
M00056036B:B01	ES 179	648045	1719.C01.gz43_219174
M00056036B:F02	ES 179	408428	1719.C05.gz43_219238
M00056036D:B06	ES 179	468689	1719.C14.gz43_219382
M00056036D:D01	ES 179	452729	1719.C15.gz43_219398
M00056036D:F05	ES 179	644054	1719.C17.gz43_219430
M00056037A:D11	ES 179	645530	1719.C20.gz43_219478
M00056037A:E10	ES 179	645707	1719.C22.gz43_219510
M00056037B:G02	ES 179	646088	1719.D03.gz43_219207
M00056037C:D06	ES 179	476077	1719.D09.gz43_219303
M00056037C:G11	ES 179	638912	1719.D10.gz43_219319
M00056038B:G08	ES 179	481614	1719.D15.gz43_219399
M00056038D:F03	ES 179	468330	1719.D21.gz43_219495
M00056039A:A02	ES 179	550365	1719.D23.gz43_219527
M00056039A:F04	ES 179	647976	1719.E01.gz43_219176
M00056039B:C03	ES 179	649293	1719.E04.gz43_219224
M00056039C:D05	ES 179	453804	1719.E08.gz43_219288
M00056039C:G05	ES 179	645973	1719.E11.gz43_219336

Table 13

CloneID	ES No	ClusterID	SequenceName
M00056039C:H01	ES 179	642852	1719.E12.gz43_219352
M00056040A:E09	ES 179	647144	1719.E15.gz43_219400
M00056040C:A03	ES 179	649118	1719.E20.gz43_219480
M00056040C:B03	ES 179	454438	1719.E21.gz43_219496
M00056040C:C12	ES 179	646687	1719.E22.gz43_219512
M00056041A:C07	ES 179	479722	1719.F05.gz43_219241
M00056041B:F03	ES 179	644817	1719.F10.gz43_219321
M00056042B:A03	ES 179	558432	1719.F23.gz43_219529
M00056042B:B05	ES 179	483266	1719.F24.gz43_219545
M00056043A:A09	ES 179	460727	1719.G13.gz43_219370
M00056043A:H12	ES 179	556325	1719.G16.gz43_219418
M00056043B:E03	ES 179	643897	1719.G19.gz43_219466
M00056043C:G03	ES 179	490898	1719.G24.gz43_219546
M00056043D:E03	ES 179	641193	1719.H04.gz43_219227
M00056044B:A01	ES 179	236965	1719.H12.gz43_219355
M00056044C:C01	ES 179	649900	1719.H15.gz43_219403
M00056044D:B04	ES 179	646579	1719.H19.gz43_219467
M00056044D:F01	ES 179	588502	1719.H22.gz43_219515
M00056044D:G07	ES 179	458683	1719.H24.gz43_219547
M00056045A:D03	ES 179	557676	1719.I01.gz43_219180
M00056045C:C09	ES 179	449814	1719.I10.gz43_219324
M00056045D:C09	ES 180	402476	1719.I21.gz43_219500
M00056045D:E06	ES 180	462293	1719.I23.gz43_219532
M00056046A:B04	ES 180	644738	1719.J02.gz43_219197
M00056046A:B12	ES 180	461517	1719.J04.gz43_219229
M00056046A:D12	ES 180	559550	1719.J06.gz43_219261
M00056046A:G08	ES 180	452102	1719.J07.gz43_219277
M00056046D:C11	ES 180	645070	1719.K04.gz43_219230
M00056047A:E09	ES 180	650348	1719.K09.gz43_219310
M00056047B:D11	ES 180	639711	1719.K17.gz43_219438
M00056047C:E03	ES 180	639255	1719.K22.gz43_219518
M00056047C:E08	ES 180	454844	1719.K23.gz43_219534
M00056047D:G10	ES 180	557853	1719.L06.gz43_219263
M00056048A:D12	ES 180	644894	1719.L09.gz43_219311
M00056048B:E01	ES 180	451544	1719.L12.gz43_219359
M00056048D:B09	ES 180	456840	1719.L19.gz43_219471
M00056049A:C11	ES 180	612572	1719.L22.gz43_219519
M00056049B:E11	ES 180	645942	1719.M04.gz43_219232
M00056049C:A08	ES 180	642184	1719.M06.gz43_219264
M00056049C:H04	ES 180	643748	1719.M11.gz43_219344
M00056049C:H07	ES 180	554070	1719.M12.gz43_219360
M00056049D:D03	ES 180	645431	1719.M16.gz43_219424
M00056049D:E01	ES 180	641715	1719.M17.gz43_219440

Table 13

CloneID	ES No	ClusterID	SequenceName
M00056050A:B05	ES 180	644686	1719.M19.gz43_219472
M00056050A:D02	ES 180	558439	1719.M21.gz43_219504
M00056050C:A09	ES 180	644639	1719.N01.gz43_219185
M00056050D:F04	ES 180	406734	1719.N07.gz43_219281
M00056051A:C03	ES 180	649259	1719.N11.gz43_219345
M00056051A:H11	ES 180	528616	1719.N12.gz43_219361
M00056051B:B03	ES 180	645375	1719.N15.gz43_219409
M00056051C:C09	ES 180	595066	1719.N21.gz43_219505
M00056051C:H09	ES 180	587106	1719.N23.gz43_219537
M00056051D:A07	ES 180	640603	1719.N24.gz43_219553
M00056051D:H02	ES 180	645151	1719.O05.gz43_219250
M00056052A:A11	ES 180	649429	1719.O06.gz43_219266
M00056052A:C07	ES 180	644819	1719.O07.gz43_219282
M00056052C:G07	ES 180	647038	1719.O16.gz43_219426
M00056052D:G01	ES 180	641786	1719.O22.gz43_219522
M00056053A:F01	ES 180	506920	1719.P03.gz43_219219
M00056053C:B04	ES 180	645814	1719.P08.gz43_219299
M00056053C:E04	ES 180	232093	1719.P10.gz43_219331
M00056053D:D07	ES 180	497101	1719.P15.gz43_219411
M00056054A:B06	ES 180	644692	1719.P17.gz43_219443
M00056054A:D09	ES 180	465589	1719.P18.gz43_219459
M00056054A:E03	ES 180	467255	1719.P19.gz43_219475
M00056054A:G07	ES 180	647306	1719.P22.gz43_219523
M00056054B:G05	ES 180	645049	1720.A02.gz43_219572
M00056054B:H11	ES 180	648013	1720.A03.gz43_219588
M00056054C:C09	ES 180	558494	1720.A04.gz43_219604
M00056054C:E12	ES 180	454906	1720.A06.gz43_219636
M00056055A:E04	ES 180	447676	1720.A14.gz43_219764
M00056055B:B06	ES 180	640818	1720.A18.gz43_219828
M00056057B:D01	ES 180	466795	1720.C02.gz43_219574
M00056057B:E12	ES 180	644927	1720.C04.gz43_219606
M00056057C:B02	ES 180	648688	1720.C05.gz43_219622
M00056057C:D06	ES 180	456059	1720.C08.gz43_219670
M00056057C:E01	ES 180	447635	1720.C09.gz43_219686
M00056057C:E12	ES 180	644928	1720.C12.gz43_219734
M00056057D:E11	ES 180	641469	1720.C15.gz43_219782
M00056058A:B07	ES 180	558154	1720.C16.gz43_219798
M00056058A:F08	ES 180	467780	1720.C19.gz43_219846
M00056058B:H09	ES 180	452630	1720.C22.gz43_219894
M00056059A:A02	ES 180	644597	1720.D06.gz43_219639
M00056059A:B01	ES 180	649054	1720.D08.gz43_219671
M00056059B:D10	ES 180	473007	1720.D11.gz43_219719
M00056060C:C06	ES 180	448627	1720.E04.gz43_219608
M00056060D:H11	ES 180	642166	1720.E10.gz43_219704

Table 13

CloneID	ES No	ClusterID	SequenceName
M00056061A:E05	ES 180	644916	1720.E12.gz43_219736
M00056061B:A03	ES 180	641801	1720.E13.gz43_219752
M00056062D:D08	ES 180	446415	1720.F20.gz43_219865
M00056062D:F12	ES 180	643510	1720.G01.gz43_219562
M00056063C:F10	ES 180	375577	1720.G15.gz43_219786
M00056063C:G11	ES 180	650549	1720.G16.gz43_219802
M00056065B:A02	ES 180	641253	1720.H06.gz43_219643
M00056065D:C11	ES 180	643381	1720.H16.gz43_219803
M00056066A:D03	ES 180	553923	1720.H20.gz43_219867
M00056066B:H04	ES 180	14157	1720.I02.gz43_219580
M00056066D:G04	ES 180	461351	1720.I16.gz43_219804
M00056067A:A12	ES 180	455716	1720.I18.gz43_219836
M00056067B:D08	ES 180	645900	1720.I21.gz43_219884
M00056068D:A06	ES 180	644822	1720.J18.gz43_219837
M00056068D:E06	ES 180	641253	1720.J22.gz43_219901
M00056069A:F01	ES 180	460047	1720.K06.gz43_219646
M00056069A:F06	ES 180	644225	1720.K08.gz43_219678
M00056069B:E04	ES 180	645076	1720.K14.gz43_219774
M00056070C:B09	ES 180	644701	1720.L12.gz43_219743
M00056072B:C06	ES 180	551181	1720.M11.gz43_219728
M00056072D:E08	ES 180	649364	1720.M21.gz43_219888
M00056073B:H11	ES 180	636654	1720.N08.gz43_219681
M00056074B:D12	ES 180	643348	1720.N23.gz43_219921
M00056074B:E11	ES 180	641135	1720.O02.gz43_219586
M00056074C:H08	ES 180	487567	1720.O12.gz43_219746
M00056074C:H09	ES 180	651108	1720.O13.gz43_219762
M00056077B:E03	ES 180	448485	1729.A06.gz43_217713
M00056077C:H02	ES 180	646696	1729.A12.gz43_217809
M00056078A:D07	ES 180	479868	1729.A20.gz43_217937
M00056078B:G02	ES 180	650900	1729.B04.gz43_217682
M00056079A:B01	ES 180	613722	1729.B18.gz43_217906
M00056080C:D04	ES 180	464778	1729.C22.gz43_217971
M00056081A:C05	ES 180	649149	1729.D04.gz43_217684
M00056081B:F09	ES 180	640891	1729.D12.gz43_217812
M00056082A:E12	ES 180	560054	1729.E11.gz43_217797
M00056082B:G07	ES 180	570939	1729.E15.gz43_217861
M00056083D:D11	ES 180	647437	1729.F16.gz43_217878
M00056084C:D11	ES 180	649202	1729.G03.gz43_217671
M00056087B:G12	ES 180	644715	1729.H12.gz43_217816
M00056087D:E04	ES 180	446243	1729.H22.gz43_217976
M00056087D:G07	ES 180	649520	1729.H24.gz43_218008
M00056089D:A09	ES 180	454176	1729.J05.gz43_217706
M00056089D:E07	ES 180	649356	1729.J08.gz43_217754
M00056091A:E04	ES 180	644054	1729.K04.gz43_217691

Table 13

CloneID	ES No	ClusterID	SequenceName
M00056091C:C06	ES 180	644712	1729.K11.gz43_217803
M00056091C:D09	ES 180	645050	1729.K13.gz43_217835
M00056091C:H03	ES 180	464267	1729.K15.gz43_217867
M00056091D:C12	ES 180	645409	1729.K17.gz43_217899
M00056091D:E10	ES 180	649328	1729.K20.gz43_217947
M00056092B:D10	ES 180	535436	1729.L02.gz43_217660
M00056092C:E12	ES 180	710155	1729.L08.gz43_217756
M00056093A:B12	ES 180	650547	1729.L16.gz43_217884
M00056093A:F08	ES 180	418763	1729.L18.gz43_217916
M00056093B:D03	ES 180	645131	1729.L20.gz43_217948
M00056095A:C02	ES 180	644543	1729.M22.gz43_217981
M00056095B:A07	ES 180	643440	1729.N06.gz43_217726
M00056095C:E02	ES 180	644965	1729.N12.gz43_217822
M00056095C:G07	ES 180	649514	1729.N14.gz43_217854
M00056097B:C04	ES 180	649082	1729.P04.gz43_217696
M00056097B:G01	ES 180	649570	1729.P06.gz43_217728
M00056098B:C04	ES 180	649054	1729.P16.gz43_217888
M00056098D:A08	ES 180	597647	1729.P22.gz43_217984
M00056120C:H04	ES 180	648654	1731.A01.gz43_219940
M00056120D:F01	ES 180	644037	1731.A02.gz43_219956
M00056121A:E05	ES 180	464990	1731.A09.gz43_220068
M00056121D:A12	ES 180	642204	1731.A19.gz43_220228
M00056121D:C11	ES 180	648013	1731.A20.gz43_220244
M00056122A:A05	ES 180	503122	1731.A22.gz43_220276
M00056122A:B05	ES 180	589098	1731.A23.gz43_220292
M00056122A:D02	ES 180	648076	1731.A24.gz43_220308
M00056122B:A07	ES 180	639555	1731.B04.gz43_219989
M00056122B:G01	ES 180	648109	1731.B07.gz43_220037
M00056122B:G09	ES 180	627515	1731.B08.gz43_220053
M00056122C:H12	ES 180	460190	1731.B12.gz43_220117
M00056122D:B07	ES 180	557419	1731.B13.gz43_220133
M00056122D:F10	ES 180	646917	1731.B17.gz43_220197
M00056123B:F02	ES 180	531461	1731.B23.gz43_220293
M00056123B:G05	ES 180	648547	1731.C01.gz43_219942
M00056123D:A07	ES 180	627341	1731.C05.gz43_220006
M00056124B:C12	ES 180	477555	1731.C14.gz43_220150
M00056124D:F06	ES 180	515350	1731.C22.gz43_220278
M00056124D:G03	ES 180	455808	1731.C23.gz43_220294
M00056125B:F01	ES 180	465127	1731.D04.gz43_219991
M00056127A:A10	ES 180	422242	1731.D07.gz43_220039
M00056127A:H03	ES 180	644928	1731.D11.gz43_220103
M00056127B:E11	ES 180	638934	1731.D13.gz43_220135
M00056127C:C02	ES 180	639774	1731.D15.gz43_220167
M00056127C:C06	ES 180	649095	1731.D16.gz43_220183

Table 13

CloneID	ES No	ClusterID	SequenceName
M00056127D:G10	ES 180	643510	1731.D23.gz43_220295
M00056128B:A07	ES 180	456985	1731.E07.gz43_220040
M00056128B:D03	ES 180	452941	1731.E08.gz43_220056
M00056128C:B11	ES 180	646584	1731.E11.gz43_220104
M00056128C:F02	ES 180	647248	1731.E14.gz43_220152
M00056129A:G01	ES 180	647431	1731.E21.gz43_220264
M00056129C:F09	ES 180	476380	1731.F03.gz43_219977
M00056130B:E11	ES 180	646785	1731.F13.gz43_220137
M00056130C:C12	ES 180	649299	1731.F15.gz43_220169
M00056130C:F08	ES 180	647290	1731.F16.gz43_220185
M00056130D:E06	ES 180	556336	1731.F22.gz43_220281
M00056131A:E09	ES 180	453726	1731.G05.gz43_220010
M00056131B:E01	ES 180	562378	1731.G12.gz43_220122
M00056131C:H03	ES 180	649735	1731.G16.gz43_220186
M00056131D:B02	ES 180	503628	1731.G19.gz43_220234
M00056132B:C12	ES 180	635354	1731.H02.gz43_219963
M00056132C:F04	ES 180	557026	1731.H06.gz43_220027
M00056133B:F01	ES 180	642936	1731.H18.gz43_220219
M00056133D:D09	ES 180	463824	1731.I01.gz43_219948
M00056134A:D04	ES 180	640695	1731.I07.gz43_220044
M00056134B:B10	ES 180	640737	1731.I10.gz43_220092
M00056134C:C06	ES 180	470006	1731.I14.gz43_220156
M00056134D:B07	ES 180	708175	1731.I21.gz43_220268
M00056134D:F02	ES 180	649482	1731.I24.gz43_220316
M00056134D:G07	ES 180	711493	1731.J02.gz43_219965
M00056134D:G11	ES 180	649617	1731.J03.gz43_219981
M00056135B:E03	ES 180	459521	1731.J10.gz43_220093
M00056135C:C05	ES 180	646039	1731.J16.gz43_220189
M00056135C:C08	ES 180	642650	1731.J17.gz43_220205
M00056135C:H06	ES 180	557867	1731.J19.gz43_220237
M00056136A:B11	ES 180	648996	1731.J23.gz43_220301
M00056136D:B08	ES 180	641957	1731.K06.gz43_220030
M00056137B:F07	ES 180	648311	1731.K14.gz43_220158
M00056137B:F11	ES 180	478393	1731.K15.gz43_220174
M00056137C:A01	ES 180	642275	1731.K17.gz43_220206
M00056137C:E01	ES 180	639395	1731.K19.gz43_220238
M00056137C:G02	ES 180	645367	1731.K20.gz43_220254
M00056137D:H05	ES 181	648742	1731.L02.gz43_219967
M00056138A:B11	ES 181	458938	1731.L04.gz43_219999
M00056138B:F05	ES 181	549691	1731.L10.gz43_220095
M00056138D:G08	ES 181	651015	1731.L17.gz43_220207
M00056139A:D12	ES 181	647232	1731.L20.gz43_220255
M00056139D:E05	ES 181	648341	1731.M08.gz43_220064

Table 13

CloneID	ES No	ClusterID	SequenceName
M00056139D:H04	ES 181	514838	1731.M10.gz43_220096
M00056140A:A07	ES 181	450049	1731.M11.gz43_220112
M00056140A:F12	ES 181	646581	1731.M16.gz43_220192
M00056140B:G06	ES 181	649557	1731.M22.gz43_220288
M00056140C:E04	ES 181	648721	1731.N01.gz43_219953
M00056140D:G07	ES 181	649278	1731.N07.gz43_220049
M00056141C:C10	ES 181	650745	1731.N13.gz43_220145
M00056141C:H01	ES 181	470667	1731.N16.gz43_220193
M00056141C:H07	ES 181	644686	1731.N17.gz43_220209
M00056141D:D09	ES 181	562755	1731.N22.gz43_220289
M00056141D:E08	ES 181	446164	1731.N23.gz43_220305
M00056142A:F03	ES 181	648481	1731.O01.gz43_219954
M00056142B:D02	ES 181	650076	1731.O06.gz43_220034
M00056142C:A09	ES 181	452738	1731.O10.gz43_220098
M00056143A:H08	ES 181	419114	1731.O23.gz43_220306
M00056144B:C01	ES 181	558377	1731.P07.gz43_220051
M00056144D:C05	ES 181	647949	1731.P12.gz43_220131
M00056146A:A09	ES 181	550714	1732.A05.gz43_220388
M00056146A:H09	ES 181	648667	1732.A12.gz43_220500
M00056146B:E05	ES 181	640634	1732.A14.gz43_220532
M00056146D:D04	ES 181	488592	1732.A20.gz43_220628
M00056149C:A02	ES 181	465734	1732.C11.gz43_220486
M00056149C:B01	ES 181	459012	1732.C12.gz43_220502
M00056149C:E10	ES 181	650877	1732.C16.gz43_220566
M00056149D:F06	ES 181	639485	1732.C22.gz43_220662
M00056150A:E04	ES 181	650820	1732.C24.gz43_220694
M00056151A:E07	ES 181	463513	1732.D16.gz43_220567
M00056152A:B11	ES 181	605761	1732.E11.gz43_220488
M00056152A:D07	ES 181	461135	1732.E13.gz43_220520
M00056152C:G08	ES 181	651075	1732.E20.gz43_220632
M00056153A:G04	ES 181	644221	1732.F07.gz43_220425
M00056153A:H07	ES 181	644801	1732.F09.gz43_220457
M00056153B:F11	ES 181	449882	1732.F16.gz43_220569
M00056154B:D02	ES 181	649443	1732.G08.gz43_220442
M00056154B:F11	ES 181	650249	1732.G10.gz43_220474
M00056155A:G09	ES 181	640162	1732.G24.gz43_220698
M00056155B:A02	ES 181	646323	1732.H01.gz43_220331
M00056157A:B11	ES 181	416624	1732.I08.gz43_220444
M00056157B:A08	ES 181	642244	1732.I12.gz43_220508
M00056157B:H06	ES 181	446184	1732.I14.gz43_220540
M00056157C:E10	ES 181	554581	1732.I19.gz43_220620
M00056157D:C02	ES 181	648930	1732.I21.gz43_220652
M00056157D:H08	ES 181	646596	1732.I23.gz43_220684
M00056158C:D11	ES 181	649482	1732.J05.gz43_220397



Table 13

CloneID	ES No	ClusterID	SequenceName
M00056158C:F09	ES 181	650987	1732.J06.gz43_220413
M00056159A:A08	ES 181	644856	1732.J14.gz43_220541
M00056159A:E03	ES 181	650909	1732.J16.gz43_220573
M00056159B:E06	ES 181	648774	1732.J21.gz43_220653
M00056159C:C11	ES 181	459260	1732.J23.gz43_220685
M00056160B:D06	ES 181	414821	1732.K09.gz43_220462
M00056160C:F12	ES 181	463966	1732.K15.gz43_220558
M00056160C:G01	ES 181	645100	1732.K16.gz43_220574
M00056160D:C06	ES 181	649991	1732.K20.gz43_220638
M00056161C:G06	ES 181	650348	1732.L12.gz43_220511
M00056161C:H10	ES 181	468262	1732.L13.gz43_220527
M00056162A:B06	ES 181	467972	1732.L19.gz43_220623
M00056162A:C09	ES 181	649947	1732.L20.gz43_220639
M00056162A:E09	ES 181	555634	1732.L21.gz43_220655
M00056162A:F01	ES 181	634409	1732.L23.gz43_220687
M00056162A:G09	ES 181	584499	1732.L24.gz43_220703
M00056162C:F02	ES 181	647412	1732.M07.gz43_220432
M00056162D:A01	ES 181	649782	1732.M11.gz43_220496
M00056162D:D03	ES 181	650116	1732.M13.gz43_220528
M00056162D:D06	ES 181	380477	1732.M14.gz43_220544
M00056163A:B10	ES 181	649883	1732.M17.gz43_220592
M00056164A:H03	ES 181	224092	1732.N20.gz43_220641
M00056165C:B11	ES 181	650534	1732.O13.gz43_220530
M00056165D:D09	ES 181	649578	1732.O15.gz43_220562
M00056167C:H06	ES 181	414006	1732.P18.gz43_220611
M00056168A:C06	ES 181	558915	1741.A01.gz43_220708
M00056168C:A05	ES 181	649795	1741.A09.gz43_220836
M00056169B:C02	ES 181	458683	1741.A21.gz43_221028
M00056169C:F07	ES 181	458085	1741.B05.gz43_220773
M00056169D:A03	ES 181	555771	1741.B08.gz43_220821
M00056169D:D05	ES 181	648777	1741.B12.gz43_220885
M00056169D:H05	ES 181	650800	1741.B16.gz43_220949
M00056170B:B09	ES 181	642256	1741.B24.gz43_221077
M00056170B:C04	ES 181	602324	1741.C01.gz43_220710
M00056170C:C09	ES 181	394772	1741.C06.gz43_220790
M00056171A:H01	ES 181	646173	1741.C20.gz43_221014
M00056171C:A08	ES 181	650063	1741.D02.gz43_220727
M00056172A:H06	ES 181	561747	1741.D14.gz43_220919
M00056172B:A12	ES 181	648855	1741.D15.gz43_220935
M00056173D:C05	ES 181	646699	1741.E07.gz43_220808
M00056174B:D02	ES 181	646915	1741.E14.gz43_220920
M00056174B:E02	ES 181	647086	1741.E16.gz43_220952
M00056174B:E04	ES 181	640285	1741.E17.gz43_220968
M00056174B:H11	ES 181	557010	1741.E20.gz43_221016

Table 13

CloneID	ES No	ClusterID	SequenceName
M00056174C:F06	ES 181	479997	1741.E24.gz43_221080
M00056174C:H09	ES 181	648063	1741.F04.gz43_220761
M00056175A:A06	ES 181	453768	1741.F10.gz43_220857
M00056175A:C04	ES 181	649136	1741.F11.gz43_220873
M00056175C:A10	ES 181	645288	1741.F19.gz43_221001
M00056175C:B11	ES 181	650146	1741.F20.gz43_221017
M00056175D:A06	ES 181	648820	1741.F24.gz43_221081
M00056175D:E05	ES 181	649299	1741.G03.gz43_220746
M00056176A:D06	ES 181	593173	1741.G07.gz43_220810
M00056176B:B05	ES 181	457272	1741.G10.gz43_220858
M00056176B:E10	ES 181	446289	1741.G12.gz43_220890
M00056176C:B11	ES 181	648865	1741.G14.gz43_220922
M00056177A:C10	ES 181	140459	1741.G19.gz43_221002
M00056177A:D12	ES 181	499690	1741.G20.gz43_221018
M00056177A:H01	ES 181	610986	1741.G23.gz43_221066
M00056177C:E08	ES 181	639996	1741.H06.gz43_220795
M00056178B:A07	ES 181	642557	1741.H14.gz43_220923
M00056178B:A11	ES 181	638730	1741.H15.gz43_220939
M00056178B:H08	ES 181	459923	1741.H17.gz43_220971
M00056178C:C02	ES 181	464778	1741.H18.gz43_220987
M00056178C:E12	ES 181	584745	1741.H20.gz43_221019
M00056178C:F02	ES 181	640922	1741.H21.gz43_221035
M00056179A:D12	ES 181	379805	1741.I08.gz43_220828
M00056179B:H12	ES 181	639886	1741.I14.gz43_220924
M00056180B:A06	ES 181	644053	1741.I23.gz43_221068
M00056180B:D05	ES 181	492982	1741.J02.gz43_220733
M00056180B:F11	ES 181	641193	1741.J04.gz43_220765
M00056180D:E06	ES 181	378694	1741.J10.gz43_220861
M00056180D:F05	ES 181	449452	1741.J12.gz43_220893
M00056180D:G07	ES 181	183842	1741.J14.gz43_220925
M00056181A:B05	ES 181	471836	1741.J16.gz43_220957
M00056181A:E07	ES 181	452729	1741.J17.gz43_220973
M00056181B:B02	ES 181	640514	1741.J19.gz43_221005
M00056181B:D06	ES 181	645521	1741.J20.gz43_221021
M00056181B:E11	ES 181	561793	1741.J21.gz43_221037
M00056181C:D02	ES 181	645578	1741.J22.gz43_221053
M00056182A:B04	ES 181	557353	1741.K02.gz43_220734
M00056182A:G11	ES 181	643206	1741.K07.gz43_220814
M00056182B:G12	ES 181	460506	1741.K09.gz43_220846
M00056182C:F08	ES 181	469409	1741.K14.gz43_220926
M00056182D:A07	ES 181	641525	1741.K15.gz43_220942
M00056183A:B09	ES 181	459974	1741.K19.gz43_221006
M00056183B:G11	ES 181	561856	1741.L04.gz43_220767
M00056183C:F01	ES 181	710362	1741.L08.gz43_220831

Table 13

CloneID	ES No	ClusterID	SequenceName
M00056183C:F11	ES 181	642840	1741.L09.gz43_220847
M00056184A:B11	ES 181	649702	1741.L14.gz43_220927
M00056184B:D08	ES 181	463487	1741.L18.gz43_220991
M00056184B:H08	ES 181	446987	1741.L20.gz43_221023
M00056184C:A09	ES 181	647688	1741.L22.gz43_221055
M00056184C:C03	ES 181	650975	1741.L24.gz43_221087
M00056184C:C07	ES 181	559349	1741.M01.gz43_220720
M00056184C:E08	ES 181	642631	1741.M04.gz43_220768
M00056184C:H03	ES 181	646309	1741.M07.gz43_220816
M00056184D:D06	ES 181	555655	1741.M11.gz43_220880
M00056185B:B06	ES 181	639132	1741.M23.gz43_221072
M00056185D:C01	ES 181	553023	1741.N07.gz43_220817
M00056185D:C06	ES 181	649085	1741.N08.gz43_220833
M00056185D:D06	ES 181	502683	1741.N09.gz43_220849
M00056185D:G07	ES 181	649577	1741.N12.gz43_220897
M00056186A:B09	ES 181	646581	1741.N14.gz43_220929
M00056186B:C03	ES 181	648491	1741.N20.gz43_221025
M00056186B:H09	ES 181	644801	1741.N24.gz43_221089
M00056186D:G05	ES 181	649705	1741.O07.gz43_220818
M00056187B:H02	ES 181	644819	1741.O12.gz43_220898
M00056188A:E05	ES 181	641945	1741.O21.gz43_221042
M00056188B:D04	ES 181	642164	1741.P01.gz43_220723
M00056188B:E07	ES 181	648344	1741.P04.gz43_220771
M00056188B:E12	ES 181	639520	1741.P05.gz43_220787
M00056188C:D02	ES 181	650188	1741.P08.gz43_220835
M00056188C:G06	ES 181	640443	1741.P11.gz43_220883
M00056188C:H04	ES 181	648665	1741.P12.gz43_220899
M00056189A:H09	ES 181	562152	1741.P18.gz43_220995
M00056189B:A01	ES 181	465594	1741.P19.gz43_221011
M00056191A:H04	ES 181	646499	1742.B04.gz43_221141
M00056191B:E08	ES 181	453762	1742.B08.gz43_221205
M00056192A:D01	ES 181	645560	1742.B19.gz43_221381
M00056195C:F12	ES 181	644916	1742.E06.gz43_221176
M00056195D:D07	ES 181	649402	1742.E12.gz43_221272
M00056196C:B03	ES 181	397363	1742.F03.gz43_221129
M00056196C:G12	ES 181	648590	1742.F09.gz43_221225
M00056197C:H01	ES 181	640101	1742.F20.gz43_221401
M00056198A:B05	ES 181	637387	1742.G01.gz43_221098
M00056200D:D05	ES 181	452066	1742.H21.gz43_221419
M00056201C:C03	ES 181	640913	1742.I08.gz43_221212
M00056203D:F05	ES 181	463168	1742.J03.gz43_221133
M00056203D:H03	ES 181	570939	1742.J04.gz43_221149
M00056204A:B08	ES 181	456920	1742.J05.gz43_221165
M00056204A:C04	ES 181	647991	1742.J07.gz43_221197

Table 13

CloneID	ES No	ClusterID	SequenceName
M00056204C:H12	ES 181	648754	1742.J18.gz43_221373
M00056205D:E06	ES 181	645802	1742.K12.gz43_221278
M00056205D:G04	ES 181	650756	1742.K15.gz43_221326
M00056206B:A10	ES 181	645177	1742.K19.gz43_221390
M00056206D:E06	ES 181	639158	1742.L03.gz43_221135
M00056206D:F07	ES 181	463545	1742.L04.gz43_221151
M00056207C:B04	ES 181	446621	1742.L17.gz43_221359
M00056208B:C10	ES 181	172843	1742.M03.gz43_221136
M00056208C:A10	ES 181	559955	1742.M06.gz43_221184
M00056208D:A12	ES 181	645223	1742.M11.gz43_221264
M00042346A:B04	ES 182	448412	1766.A01.gz43_224099
M00042346B:D12	ES 182	448491	1766.A05.gz43_224163
M00042346C:G12	ES 182	448892	1766.A09.gz43_224227
M00042432D:G02	ES 182	485237	1766.E01.gz43_224103
M00042433C:H05	ES 182	477797	1766.E13.gz43_224295
M00042434B:F04	ES 182	450334	1766.E20.gz43_224407
M00042437B:A11	ES 182	479131	1766.G01.gz43_224105
M00042438C:H11	ES 182	451183	1766.G20.gz43_224409
M00042439A:D09	ES 182	481457	1766.H03.gz43_224138
M00042461C:E09	ES 182	483219	1766.I13.gz43_224299
M00042462A:F12	ES 182	450212	1766.I19.gz43_224395
M00042464A:F06	ES 182	451793	1766.J21.gz43_224428
M00042464C:B06	ES 182	448098	1766.K04.gz43_224157
M00042470B:H11	ES 182	447377	1766.M22.gz43_224447
M00042515B:A10	ES 182	449104	1767.A01.gz43_224483
M00042515D:B11	ES 182	449215	1767.A04.gz43_224531
M00042515D:G01	ES 182	451982	1767.A05.gz43_224547
M00056209B:D02	ES 182	507050	1742.M19.gz43_221392
M00056210B:C11	ES 182	470801	1742.N09.gz43_221233
M00056210B:E03	ES 182	649354	1742.N12.gz43_221281
M00056210D:H05	ES 182	457539	1742.N15.gz43_221329
M00056211A:C08	ES 182	648036	1742.N18.gz43_221377
M00056212C:C09	ES 182	642118	1742.P01.gz43_221107
M00056213C:C01	ES 182	646275	1742.P19.gz43_221395
M00056213C:G11	ES 182	466418	1742.P24.gz43_221475
M00056214B:H03	ES 182	638807	1743.A08.gz43_221588
M00056214C:A04	ES 182	499517	1743.A10.gz43_221620
M00056214D:F05	ES 182	650975	1743.A16.gz43_221716
M00056216B:H09	ES 182	648953	1743.B17.gz43_221733
M00056217A:H11	ES 182	648155	1743.C04.gz43_221526
M00056217B:A06	ES 182	650487	1743.C05.gz43_221542
M00056217B:G03	ES 182	562359	1743.C09.gz43_221606
M00056217C:B12	ES 182	602324	1743.C10.gz43_221622

Table 13

CloneID	ES No	ClusterID	SequenceName
M00056217D:B07	ES 182	562625	1743.C16.gz43_221718
M00056218A:G11	ES 182	448780	1743.C22.gz43_221814
M00056218C:C02	ES 182	648351	1743.D05.gz43_221543
M00056218D:H06	ES 182	411603	1743.D14.gz43_221687
M00056220A:H04	ES 182	644916	1743.E16.gz43_221720
M00056220B:F11	ES 182	722253	1743.F01.gz43_221481
M00056222A:E05	ES 182	570052	1743.G11.gz43_221642
M00056222D:C06	ES 182	574166	1743.G18.gz43_221754
M00056223A:B11	ES 182	648989	1743.G23.gz43_221834
M00056223A:C03	ES 182	442347	1743.G24.gz43_221850
M00056223A:D10	ES 182	574166	1743.H01.gz43_221483
M00056223A:H07	ES 182	649709	1743.H03.gz43_221515
M00056223C:C07	ES 182	408428	1743.H11.gz43_221643
M00056224B:F01	ES 182	645549	1743.H17.gz43_221739
M00056224D:E08	ES 182	453470	1743.H23.gz43_221835
M00056225A:D08	ES 182	556635	1743.I01.gz43_221484
M00056225B:A11	ES 182	618670	1743.I06.gz43_221564
M00056227C:A01	ES 182	648777	1743.J20.gz43_221789
M00056227D:A02	ES 182	578718	1743.K04.gz43_221534
M00056228A:A02	ES 182	447892	1743.K09.gz43_221614
M00056228C:B04	ES 182	465536	1743.K24.gz43_221854
M00056229C:F05	ES 182	33738	1743.L16.gz43_221727
M00056231B:E01	ES 182	649351	1743.M11.gz43_221648
M00056232B:A11	ES 182	451487	1743.M21.gz43_221808
M00056232B:C04	ES 182	649030	1743.M23.gz43_221840
M00056232C:E06	ES 182	649272	1743.N04.gz43_221537
M00056232D:C08	ES 182	502413	1743.N09.gz43_221617
M00056235A:C12	ES 182	648816	1743.O22.gz43_221826
M00056236A:G12	ES 182	706245	1743.P07.gz43_221587
M00056236B:B03	ES 182	636876	1743.P09.gz43_221619
M00056237B:D04	ES 182	703978	1744.A06.gz43_221940
M00056237C:C05	ES 182	470292	1744.A10.gz43_222004
M00056238A:A03	ES 182	707483	1744.A19.gz43_222148
M00056238C:C11	ES 182	649042	1744.B08.gz43_221973
M00056239A:D06	ES 182	648159	1744.B14.gz43_222069
M00056240B:F08	ES 182	649396	1744.C10.gz43_222006
M00056240D:H07	ES 182	447272	1744.C15.gz43_222086
M00056242D:A02	ES 182	648989	1744.E04.gz43_221912
M00056243C:G10	ES 182	651073	1744.E22.gz43_222200
M00056244A:A01	ES 182	650463	1744.F03.gz43_221897
M00056244A:B01	ES 182	650549	1744.F04.gz43_221913
M00056245A:D11	ES 182	650463	1744.F24.gz43_222233
M00056246A:E01	ES 182	637387	1744.G17.gz43_222122
M00056246C:G07	ES 182	419255	1744.H08.gz43_221979

Table 13

CloneID	ES No	ClusterID	SequenceName
M00056246D:A07	ES 182	549178	1744.H09.gz43_221995
M00056247A:D02	ES 182	162981	1744.H17.gz43_222123
M00056247A:F07	ES 182	457221	1744.H18.gz43_222139
M00056247B:C11	ES 182	650018	1744.H21.gz43_222187
M00056249A:F11	ES 182	650919	1744.I24.gz43_222236
M00056249A:H07	ES 182	645872	1744.J02.gz43_221885
M00056249B:C02	ES 182	506719	1744.J03.gz43_221901
M00056249C:E06	ES 182	650860	1744.J10.gz43_222013
M00056250C:A08	ES 182	408961	1744.K04.gz43_221918
M00056250C:D05	ES 182	650661	1744.K07.gz43_221966
M00056251B:A12	ES 182	643327	1744.K14.gz43_222078
M00056251B:B07	ES 182	452646	1744.K15.gz43_222094
M00056251C:H04	ES 182	586794	1744.K24.gz43_222238
M00056253A:F12	ES 182	648996	1744.M08.gz43_221984
M00056253B:H04	ES 182	639119	1744.M14.gz43_222080
M00056253C:C04	ES 182	703217	1744.M18.gz43_222144
M00056253D:G04	ES 182	641874	1744.M23.gz43_222224
M00056254A:F04	ES 182	651051	1744.N02.gz43_221889
M00056254D:C04	ES 182	451361	1744.N09.gz43_222001
M00056255B:F09	ES 182	559324	1744.N18.gz43_222145
M00056255C:C04	ES 182	645472	1744.N20.gz43_222177
M00056256A:C02	ES 182	645271	1744.O01.gz43_221874
M00056256C:D12	ES 182	643944	1744.O17.gz43_222130
M00056258A:A11	ES 182	464091	1744.P19.gz43_222163
M00056258A:E10	ES 182	610269	1744.P23.gz43_222227
M00056258C:D07	ES 182	633594	1753.A05.gz43_222308
M00056258D:H06	ES 182	648590	1753.A12.gz43_222420
M00056259A:E08	ES 182	555021	1753.A17.gz43_222500
M00056259C:E03	ES 182	459914	1753.A24.gz43_222612
M00056260C:E11	ES 182	460245	1753.B14.gz43_222453
M00056260C:F08	ES 182	552839	1753.B17.gz43_222501
M00056261A:F12	ES 182	645271	1753.C03.gz43_222278
M00056262A:B07	ES 182	647897	1753.C18.gz43_222518
M00056262B:B08	ES 182	403111	1753.C23.gz43_222598
M00056262D:B11	ES 182	446572	1753.D04.gz43_222295
M00056262D:G08	ES 182	648534	1753.D06.gz43_222327
M00056263A:D08	ES 182	649262	1753.D10.gz43_222391
M00056263B:E10	ES 182	486452	1753.D17.gz43_222503
M00056264A:G05	ES 182	650679	1753.E03.gz43_222280
M00056264B:C03	ES 182	648063	1753.E06.gz43_222328
M00056265A:E01	ES 182	646609	1753.E15.gz43_222472
M00056267D:B09	ES 182	562173	1753.G15.gz43_222474
M00056268D:G07	ES 182	639520	1753.H12.gz43_222427
M00056269D:H01	ES 182	639003	1753.I03.gz43_222284

Table 13

CloneID	ES No	ClusterID	SequenceName
M00056270A:B09	ES 182	647828	1753.I06.gz43_222332
M00056270B:F02	ES 182	557857	1753.I12.gz43_222428
M00056271A:G04	ES 182	466894	1753.I24.gz43_222620
M00056271C:C06	ES 182	528162	1753.J04.gz43_222301
M00056272D:C03	ES 182	642812	1753.J22.gz43_222589
M00056273A:A07	ES 182	642200	1753.K02.gz43_222270
M00056274D:E08	ES 182	476380	1753.L06.gz43_222335
M00056276A:D05	ES 182	580179	1753.M10.gz43_222400
M00056276A:F05	ES 182	648442	1753.M14.gz43_222464
M00056276D:B12	ES 182	507066	1753.M17.gz43_222512
M00056277B:G05	ES 182	648609	1753.N05.gz43_222321
M00056279B:G06	ES 182	649592	1753.O18.gz43_222530
M00056280B:E09	ES 182	649349	1753.P13.gz43_222451
M00056280D:C06	ES 182	509202	1753.P23.gz43_222611
M00056284C:A11	ES 182	556497	1754.C23.gz43_222982
M00056285B:B01	ES 182	647839	1754.D07.gz43_222727
M00056286A:A12	ES 182	644829	1754.D20.gz43_222935
M00056286B:A04	ES 182	559857	1754.D24.gz43_222999
M00056286C:H08	ES 182	554276	1754.E10.gz43_222776
M00056287C:H08	ES 182	647462	1754.E21.gz43_222952
M00056288A:E12	ES 182	446732	1754.E23.gz43_222984
M00056288D:D03	ES 182	647759	1754.F11.gz43_222793
M00056289B:E05	ES 182	555998	1754.F20.gz43_222937
M00056289B:F09	ES 182	648524	1754.F21.gz43_222953
M00056291B:G01	ES 182	646060	1754.H12.gz43_222811
M00056291C:C11	ES 182	598471	1754.H19.gz43_222923
M00056292D:C06	ES 182	644862	1754.I07.gz43_222732
M00056293B:F02	ES 182	449882	1754.I19.gz43_222924
M00056294B:G06	ES 182	419801	1754.J20.gz43_222941
M00056295C:F12	ES 182	492587	1754.K07.gz43_222734
M00056296A:A07	ES 182	646387	1754.K12.gz43_222814
M00056297D:B10	ES 182	467709	1754.L23.gz43_222991
M00056298A:H02	ES 182	651057	1754.M07.gz43_222736
M00056298B:F10	ES 182	639804	1754.M12.gz43_222816
M00056298D:G01	ES 182	462865	1754.M22.gz43_222976
M00056299C:F06	ES 182	643984	1754.N10.gz43_222785
M00056299D:A02	ES 182	462986	1754.N12.gz43_222817
M00056300A:E06	ES 182	485480	1754.N22.gz43_222977
M00056300B:A11	ES 182	651115	1754.N24.gz43_223009
M00056301C:H08	ES 182	645844	1754.O22.gz43_222978
M00056302D:E12	ES 182	644836	1754.P22.gz43_222979
M00056303A:B03	ES 182	462398	1754.P23.gz43_222995
M00056304A:H04	ES 182	467364	1755.A17.gz43_223268
M00056304B:C05	ES 182	648683	1755.A18.gz43_223284

Table 13

CloneID	ES No	ClusterID	SequenceName
M00056304C:C03	ES 182	645073	1755.A23.gz43_223364
M00056305A:A02	ES 182	524261	1755.B06.gz43_223093
M00056305B:F09	ES 182	644880	1755.B14.gz43_223221
M00056305D:C05	ES 182	463595	1755.B20.gz43_223317
M00056305D:E08	ES 182	641681	1755.B22.gz43_223349
M00056307A:F07	ES 182	644660	1755.D05.gz43_223079
M00056307D:G02	ES 182	642145	1755.D17.gz43_223271
M00056308A:C01	ES 182	650639	1755.D20.gz43_223319
M00056308C:C12	ES 182	469802	1755.E12.gz43_223192
M00056310A:C10	ES 182	557052	1755.E15.gz43_223240
M00056310B:E06	ES 182	649514	1755.E22.gz43_223352
M00056311C:G06	ES 182	558879	1755.G04.gz43_223066
M00056313A:B06	ES 182	44503	1755.H16.gz43_223259
M00056319A:A11	ES 182	635062	1755.I11.gz43_223180
M00056320C:E08	ES 182	556444	1755.K06.gz43_223102
M00056320D:F07	ES 182	642260	1755.K10.gz43_223166
M00056323A:C09	ES 182	647951	1755.K13.gz43_223214
M00056323A:G03	ES 182	569195	1755.K15.gz43_223246
M00056323A:H05	ES 182	550403	1755.K16.gz43_223262
M00056326C:G07	ES 182	639378	1755.M08.gz43_223136
M00056328B:E07	ES 182	444222	1755.M16.gz43_223264
M00056328D:B01	ES 182	447126	1755.M19.gz43_223312
M00056329C:B09	ES 182	647248	1755.N05.gz43_223089
M00056330B:C02	ES 182	452075	1755.N14.gz43_223233
M00056333A:E09	ES 182	460929	1755.O09.gz43_223154
M00056333C:D08	ES 182	446520	1755.O23.gz43_223378
M00056338B:B08	ES 182	606129	1755.P24.gz43_223395
M00042751B:C07	ES 183	179760	1767.A07.gz43_224579
M00042751D:D03	ES 183	449215	1767.A14.gz43_224691
M00042751D:F09	ES 183	484355	1767.A16.gz43_224723
M00042751D:G06	ES 183	485431	1767.A18.gz43_224755
M00042751D:G09	ES 183	485441	1767.A19.gz43_224771
M00042752A:B04	ES 183	449275	1767.A20.gz43_224787
M00042753B:C08	ES 183	480960	1767.B13.gz43_224676
M00042753C:G12	ES 183	485183	1767.B19.gz43_224772
M00042753D:A12	ES 183	479061	1767.B20.gz43_224788
M00042753D:H11	ES 183	449746	1767.B23.gz43_224836
M00042754B:G02	ES 183	485512	1767.C02.gz43_224501
M00042755A:D09	ES 183	481614	1767.C06.gz43_224565
M00042755A:H04	ES 183	485880	1767.C10.gz43_224629
M00042755B:D01	ES 183	481594	1767.C12.gz43_224661
M00042755B:D09	ES 183	449399	1767.C13.gz43_224677
M00042755B:H04	ES 183	485882	1767.C16.gz43_224725



Table 13

CloneID	ES No	ClusterID	SequenceName
M00042755B:H11	ES 183	485907	1767.C17.gz43_224741
M00042755C:A10	ES 183	452104	1767.C19.gz43_224773
M00042756B:B01	ES 183	284586	1767.D03.gz43_224518
M00042757A:H07	ES 183	449076	1767.D15.gz43_224710
M00042758B:C06	ES 183	448325	1767.D23.gz43_224838
M00042758B:G04	ES 183	476876	1767.D24.gz43_224854
M00042760A:G12	ES 183	477098	1767.E15.gz43_224711
M00042760B:E12	ES 183	453024	1767.E18.gz43_224759
M00042760C:F10	ES 183	476438	1767.E22.gz43_224823
M00042761B:C11	ES 183	473592	1767.F04.gz43_224536
M00042761B:E05	ES 183	475562	1767.F08.gz43_224600
M00042761C:G11	ES 183	477521	1767.F12.gz43_224664
M00042761D:D12	ES 183	474580	1767.F17.gz43_224744
M00042762A:G02	ES 183	455143	1767.F22.gz43_224824
M00042763B:A03	ES 183	470801	1767.G09.gz43_224617
M00042764A:F12	ES 183	448801	1767.G22.gz43_224825
M00042764B:B10	ES 183	453606	1767.H01.gz43_224490
M00042764B:G10	ES 183	448865	1767.H04.gz43_224538
M00042764C:B10	ES 183	448251	1767.H05.gz43_224554
M00042766A:D07	ES 183	128749	1767.I04.gz43_224539
M00042766B:G11	ES 183	484633	1767.I08.gz43_224603
M00042766D:C05	ES 183	450551	1767.I14.gz43_224699
M00042767A:B10	ES 183	479880	1767.I18.gz43_224763
M00042767B:E10	ES 183	482868	1767.I21.gz43_224811
M00042767B:G04	ES 183	484964	1767.I22.gz43_224827
M00042767B:G09	ES 183	484987	1767.I23.gz43_224843
M00042767D:D02	ES 183	449437	1767.J05.gz43_224556
M00042768A:H09	ES 183	486452	1767.J09.gz43_224620
M00042768B:F02	ES 183	456513	1767.J11.gz43_224652
M00042768C:E06	ES 183	482486	1767.J15.gz43_224716
M00042769B:E12	ES 183	482876	1767.K05.gz43_224557
M00042769C:B01	ES 183	479851	1767.K08.gz43_224605
M00042769C:B06	ES 183	479868	1767.K09.gz43_224621
M00042770A:D02	ES 183	449438	1767.K15.gz43_224717
M00042771B:G05	ES 183	485073	1767.L12.gz43_224670
M00042771D:F02	ES 183	449592	1767.L16.gz43_224734
M00042772C:C12	ES 183	447218	1767.L20.gz43_224798
M00042773A:G07	ES 183	485086	1767.M02.gz43_224511
M00042773A:H11	ES 183	449689	1767.M03.gz43_224527
M00042773B:H08	ES 183	486547	1767.M06.gz43_224575
M00042774B:C01	ES 183	481057	1767.M14.gz43_224703
M00042774C:B09	ES 183	449261	1767.M16.gz43_224735
M00042775B:C09	ES 183	480703	1767.N04.gz43_224544
M00042776D:D01	ES 183	448152	1767.N17.gz43_224752

Table 13

CloneID	ES No	ClusterID	SequenceName
M00042776D:G10	ES 183	477399	1767.N18.gz43_224768
M00042777A:B10	ES 183	472119	1767.N20.gz43_224800
M00042777B:B05	ES 183	472101	1767.O02.gz43_224513
M00042777B:H02	ES 183	449015	1767.O03.gz43_224529
M00042778A:C04	ES 183	473433	1767.O11.gz43_224657
M00042778A:G07	ES 183	477387	1767.O12.gz43_224673
M00042778B:B07	ES 183	448260	1767.O15.gz43_224721
M00042778D:F11	ES 183	475797	1767.O23.gz43_224849
M00042779A:B04	ES 183	472425	1767.O24.gz43_224865
M00042779D:D04	ES 183	453385	1767.P15.gz43_224722
M00042779D:E06	ES 183	474823	1767.P17.gz43_224754
M00042780A:H05	ES 183	477757	1767.P24.gz43_224866
M00042809D:C12	ES 183	649735	1777.A23.gz43_252199
M00042809D:G09	ES 183	557375	1777.B01.gz43_251848
M00042811A:A01	ES 183	500896	1777.B23.gz43_252200
M00042811C:B06	ES 183	537506	1777.C03.gz43_251881
M00042812B:C01	ES 183	456793	1777.C11.gz43_252009
M00042815C:C02	ES 183	448340	1777.E11.gz43_252011
M00042815C:F10	ES 183	448793	1777.E13.gz43_252043
M00042816A:C09	ES 183	735534	1777.E17.gz43_252107
M00042816A:G04	ES 183	639163	1777.E21.gz43_252171
M00042816B:C08	ES 183	545162	1777.F03.gz43_251884
M00042817C:B04	ES 183	727517	1777.G05.gz43_251917
M00042819C:H02	ES 183	449718	1777.H14.gz43_252062
M00042821C:H06	ES 183	485653	1777.I17.gz43_252111
M00042824A:C02	ES 183	52034	1777.K05.gz43_251921
M00042825A:B05	ES 183	449258	1777.K17.gz43_252113
M00042828D:B11	ES 183	472400	1777.M09.gz43_251987
M00042831A:F12	ES 183	484207	1777.N18.gz43_252132
M00042831D:G06	ES 183	484669	1777.O01.gz43_251861
M00042833C:G05	ES 183	485020	1777.O18.gz43_252133
M00042835D:C04	ES 183	450883	1777.P19.gz43_252150
M00042836A:B12	ES 183	480227	1777.P24.gz43_252230
M00042836D:C07	ES 183	449291	1778.A11.gz43_225411
M00042838A:E02	ES 183	475111	1778.B02.gz43_225268
M00042839B:F05	ES 183	475942	1778.B23.gz43_225604
M00042839D:F02	ES 183	476256	1778.C07.gz43_225349
M00042840B:F08	ES 183	452202	1778.C12.gz43_225429
M00042840C:B12	ES 183	447517	1778.C14.gz43_225461
M00042841B:H05	ES 183	450673	1778.C18.gz43_225525
M00042841D:G10	ES 183	446657	1778.C23.gz43_225605
M00042842A:B04	ES 183	472307	1778.C24.gz43_225621
M00042842A:B12	ES 183	448233	1778.D01.gz43_225254
M00042842C:H11	ES 183	477555	1778.D12.gz43_225430

Table 13

CloneID	ES No	ClusterID	SequenceName
M00042843A:E07	ES 183	474597	1778.D18.gz43_225526
M00042843B:F05	ES 183	453856	1778.D22.gz43_225590
M00042844A:D02	ES 183	447983	1778.E07.gz43_225351
M00042844C:B03	ES 183	448230	1778.E12.gz43_225431
M00042844C:C12	ES 183	448383	1778.E14.gz43_225463
M00042844D:H02	ES 183	477593	1778.E18.gz43_225527
M00042845A:B05	ES 183	448104	1778.E19.gz43_225543
M00042845C:A09	ES 183	447983	1778.F03.gz43_225288
M00042846C:D09	ES 183	639991	1778.F23.gz43_225608
M00042847A:F04	ES 183	727875	1778.G10.gz43_225401
M00042848D:G12	ES 183	448029	1778.H06.gz43_225338
M00042849B:G06	ES 183	485029	1778.H12.gz43_225434
M00042850A:B11	ES 183	404603	1778.H20.gz43_225562
M00042850C:C10	ES 183	646583	1778.I06.gz43_225339
M00042851A:B08	ES 183	449273	1778.I11.gz43_225419
M00042851A:E11	ES 183	483274	1778.I12.gz43_225435
M00042851D:B08	ES 183	452990	1778.I18.gz43_225531
M00042852B:C06	ES 183	480900	1778.J04.gz43_225308
M00042852D:G07	ES 183	485480	1778.J10.gz43_225404
M00042853A:G03	ES 183	644190	1778.J12.gz43_225436
M00042854A:B11	ES 183	551811	1778.K04.gz43_225309
M00042854A:D05	ES 183	725641	1778.K07.gz43_225357
M00042854B:F05	ES 183	725266	1778.K12.gz43_225437
M00042854D:A05	ES 183	482071	1778.K16.gz43_225501
M00042855B:H06	ES 183	485841	1778.L05.gz43_225326
M00042855C:G11	ES 183	484789	1778.L08.gz43_225374
M00042855D:A12	ES 183	449110	1778.L09.gz43_225390
M00042855D:B12	ES 183	480005	1778.L12.gz43_225438
M00042855D:D06	ES 183	456737	1778.L14.gz43_225470
M00042857C:G04	ES 183	449652	1778.M11.gz43_225423
M00042857C:G05	ES 183	484841	1778.M12.gz43_225439
M00042858A:A08	ES 183	479084	1778.M14.gz43_225471
M00042859B:D06	ES 183	449403	1778.N02.gz43_225280
M00042859D:D12	ES 183	481664	1778.N11.gz43_225424
M00042860A:C01	ES 183	480641	1778.N12.gz43_225440
M00042860A:H04	ES 183	485924	1778.N16.gz43_225504
M00042860C:E02	ES 183	483066	1778.N23.gz43_225616
M00042860D:F02	ES 183	449604	1778.O02.gz43_225281
M00042860D:F05	ES 183	484091	1778.O03.gz43_225297
M00042860D:H10	ES 183	449751	1778.O06.gz43_225345
M00042861A:F04	ES 183	451368	1778.O09.gz43_225393
M00042861C:C03	ES 183	481319	1778.O13.gz43_225457
M00042861C:F07	ES 183	484468	1778.O15.gz43_225489
M00042861D:D09	ES 183	449407	1778.O18.gz43_225537

Table 13

CloneID	ES No	ClusterID	SequenceName
M00042862A:C01	ES 183	480640	1778.O23.gz43_225617
M00042862C:E02	ES 183	449521	1778.P09.gz43_225394
M00056352D:B04	ES 183	559486	1780.A05.gz43_226083
M00056352D:H02	ES 183	594994	1780.A10.gz43_226163
M00056353C:E12	ES 183	736210	1780.B04.gz43_226068
M00056353D:D10	ES 183	731925	1780.B11.gz43_226180
M00056355A:C10	ES 183	463966	1780.C10.gz43_226165
M00056355B:D02	ES 183	557029	1780.C16.gz43_226261
M00056355C:A05	ES 183	553951	1780.C18.gz43_226293
M00056355D:A05	ES 183	727129	1780.D07.gz43_226118
M00056355D:B08	ES 183	468467	1780.D09.gz43_226150
M00056355D:G04	ES 183	727235	1780.D11.gz43_226182
M00056356C:H07	ES 183	732150	1780.E02.gz43_226039
M00056357A:C08	ES 183	551167	1780.E10.gz43_226167
M00056357C:C06	ES 183	724039	1780.E23.gz43_226375
M00056358A:A10	ES 183	723859	1780.F10.gz43_226168
M00056358A:G05	ES 183	734150	1780.F12.gz43_226200
M00056358D:A06	ES 183	465697	1780.F22.gz43_226360
M00056359A:C08	ES 183	623978	1780.G05.gz43_226089
M00056359A:F06	ES 183	416326	1780.G06.gz43_226105
M00056360A:D11	ES 183	561719	1780.H08.gz43_226138
M00056360B:D09	ES 183	528981	1780.H12.gz43_226202
M00056360C:A03	ES 183	723869	1780.H14.gz43_226234
M00056360C:B01	ES 183	480005	1780.H15.gz43_226250
M00056360D:H10	ES 183	732144	1780.H23.gz43_226378
M00056361A:C01	ES 183	733806	1780.I01.gz43_226027
M00056361A:H06	ES 183	600856	1780.I05.gz43_226091
M00056361B:E02	ES 183	471646	1780.I10.gz43_226171
M00056361C:C06	ES 183	135364	1780.I12.gz43_226203
M00056362C:C02	ES 183	511606	1780.J12.gz43_226204
M00056363A:C06	ES 183	724907	1780.K02.gz43_226045
M00056363A:E10	ES 183	364334	1780.K05.gz43_226093
M00056363C:C12	ES 183	552891	1780.K14.gz43_226237
M00056363D:H03	ES 183	728774	1780.K22.gz43_226365
M00056364A:B04	ES 183	724792	1780.L02.gz43_226046
M00056364C:B01	ES 183	503862	1780.L08.gz43_226142
M00056364C:H08	ES 183	588959	1780.L15.gz43_226254
M00056364D:C05	ES 183	553244	1780.L17.gz43_226286
M00056365B:G10	ES 183	480924	1780.M11.gz43_226191
M00056366B:A11	ES 183	449242	1780.N05.gz43_226096
M00056367C:D06	ES 183	560859	1780.O07.gz43_226129
M00056367C:H05	ES 183	642558	1780.O12.gz43_226209
M00056368A:C11	ES 183	456535	1780.O20.gz43_226337
M00056368B:H09	ES 183	661194	1780.P05.gz43_226098

Table 13

CloneID	ES No	ClusterID	SequenceName
M00056368C:E07	ES 184	482831	1780.P07.gz43_226130
M00056368D:D03	ES 184	517298	1780.P11.gz43_226194
M00056368D:G05	ES 184	730301	1780.P14.gz43_226242
M00056369A:G06	ES 184	728389	1780.P22.gz43_226370
M00056369B:E03	ES 184	736001	1789.A03.gz43_226435
M00056370B:C10	ES 184	734646	1789.B02.gz43_226420
M00056370B:E07	ES 184	568484	1789.B04.gz43_226452
M00056370C:F01	ES 184	503625	1789.B08.gz43_226516
M00056370D:C06	ES 184	735649	1789.B11.gz43_226564
M00056371D:F07	ES 184	734943	1789.C12.gz43_226581
M00056372C:C06	ES 184	725389	1789.D04.gz43_226454
M00056373D:G01	ES 184	725381	1789.E09.gz43_226535
M00056374C:G08	ES 184	487079	1789.F03.gz43_226440
M00056375A:D11	ES 184	734348	1789.F11.gz43_226568
M00056375D:D12	ES 184	724257	1789.G01.gz43_226409
M00056376A:C10	ES 184	649411	1789.G09.gz43_226537
M00056377A:C01	ES 184	460284	1789.H03.gz43_226442
M00056377C:A01	ES 184	724694	1789.H12.gz43_226586
M00056377D:F08	ES 184	725274	1789.I03.gz43_226443
M00056378C:E10	ES 184	729993	1789.I09.gz43_226539
M00056382A:A12	ES 184	723972	1789.J12.gz43_226588
M00056382C:B11	ES 184	503491	1789.K03.gz43_226445
M00056382C:F11	ES 184	731542	1789.K05.gz43_226477
M00056383B:F08	ES 184	725321	1789.L04.gz43_226462
M00056383B:G08	ES 184	725448	1789.L06.gz43_226494
M00056383C:E07	ES 184	549790	1789.L07.gz43_226510
M00056384C:H04	ES 184	474346	1789.M01.gz43_226415
M00056384D:A04	ES 184	186372	1789.M02.gz43_226431
M00056385A:A07	ES 184	727523	1789.M10.gz43_226559
M00056386A:F08	ES 184	726636	1789.N01.gz43_226416
M00056386A:F09	ES 184	724388	1789.N02.gz43_226432
M00056386A:G01	ES 184	553035	1789.N03.gz43_226448
M00056386B:A07	ES 184	452806	1789.N06.gz43_226496
M00056386B:A11	ES 184	730660	1789.N07.gz43_226512
M00056386B:D07	ES 184	459918	1789.N10.gz43_226560
M00056386B:E09	ES 184	623408	1789.N12.gz43_226592
M00056387C:D01	ES 184	558412	1789.O11.gz43_226577
M00056388B:A05	ES 184	475682	1789.P01.gz43_226418
M00056388B:B03	ES 184	724009	1789.P03.gz43_226450
M00056389B:H03	ES 184	729637	1790.A10.gz43_226931
M00056389D:F01	ES 184	495712	1790.A17.gz43_227043
M00056390B:E10	ES 184	725165	1790.B08.gz43_226900
M00056390C:B08	ES 184	556769	1790.B11.gz43_226948

Table 13

CloneID	ES No	ClusterID	SequenceName
M00056390C:C04	ES 184	724914	1790.B12.gz43_226964
M00056391C:H12	ES 184	727150	1790.C14.gz43_226997
M00056391D:E06	ES 184	457508	1790.C18.gz43_227061
M00056392A:D11	ES 184	477296	1790.C19.gz43_227077
M00056392A:F06	ES 184	448817	1790.C20.gz43_227093
M00056392D:C05	ES 184	426297	1790.D07.gz43_226886
M00056392D:H02	ES 184	729111	1790.D08.gz43_226902
M00056393A:F01	ES 184	549480	1790.D11.gz43_226950
M00056393A:G06	ES 184	614463	1790.D12.gz43_226966
M00056393D:A09	ES 184	558794	1790.D21.gz43_227110
M00056393D:C12	ES 184	118514	1790.D24.gz43_227158
M00056394B:C11	ES 184	503173	1790.E14.gz43_226999
M00056394B:G05	ES 184	725454	1790.E19.gz43_227079
M00056394C:D07	ES 184	640158	1790.F01.gz43_226792
M00056395C:H03	ES 184	523364	1790.F23.gz43_227144
M00056395D:B01	ES 184	732821	1790.F24.gz43_227160
M00056396A:D03	ES 184	733563	1790.G08.gz43_226905
M00056396A:G10	ES 184	474981	1790.G12.gz43_226969
M00056396B:E10	ES 184	642985	1790.G16.gz43_227033
M00056396D:H01	ES 184	484934	1790.H05.gz43_226858
M00056397C:A09	ES 184	515038	1790.H17.gz43_227050
M00056398A:B10	ES 184	724851	1790.I11.gz43_226955
M00056398C:B09	ES 184	735396	1790.I24.gz43_227163
M00056398C:D10	ES 184	725095	1790.J02.gz43_226812
M00056399B:G09	ES 184	448758	1790.J15.gz43_227020
M00056399D:C11	ES 184	656268	1790.K04.gz43_226845
M00056400A:D08	ES 184	726494	1790.K10.gz43_226941
M00056400A:G10	ES 184	725451	1790.K16.gz43_227037
M00056400C:B11	ES 184	447222	1790.K24.gz43_227165
M00056400C:G04	ES 184	479851	1790.L03.gz43_226830
M00056401A:F09	ES 184	729950	1790.L12.gz43_226974
M00056401B:B01	ES 184	735234	1790.L15.gz43_227022
M00056402B:D07	ES 184	641576	1790.M06.gz43_226879
M00056402C:B09	ES 184	649591	1790.M07.gz43_226895
M00056402C:E10	ES 184	483008	1790.M09.gz43_226927
M00056402D:A01	ES 184	724714	1790.M10.gz43_226943
M00056402D:B07	ES 184	197839	1790.M11.gz43_226959
M00056403A:E09	ES 184	417549	1790.M18.gz43_227071
M00056403B:D09	ES 184	468467	1790.M23.gz43_227151
M00056403B:G12	ES 184	729779	1790.M24.gz43_227167
M00056403C:F02	ES 184	481077	1790.N03.gz43_226832
M00056403C:F03	ES 184	724411	1790.N04.gz43_226848
M00056403C:F12	ES 184	640261	1790.N05.gz43_226864
M00056404A:G03	ES 184	640756	1790.N12.gz43_226976

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CloneID	ES No	ClusterID	SequenceName
M00056404B:B06	ES 184	188309	1790.N14.gz43_227008
M00056404C:C12	ES 184	733643	1790.N22.gz43_227136
M00056404D:G03	ES 184	562769	1790.O02.gz43_226817
M00056405C:C12	ES 184	724078	1790.O11.gz43_226961
M00056405C:H04	ES 184	449228	1790.O13.gz43_226993
M00056405D:E05	ES 184	730948	1790.O17.gz43_227057
M00056406A:C02	ES 184	726411	1790.O20.gz43_227105
M00056406A:E01	ES 184	728454	1790.O23.gz43_227153
M00056406B:C05	ES 184	456577	1790.P03.gz43_226834
M00056406C:D09	ES 184	543323	1790.P10.gz43_226946
M00056406C:F12	ES 184	423420	1790.P13.gz43_226994
M00056407A:D10	ES 184	483147	1790.P15.gz43_227026
M00056407A:G03	ES 184	729809	1790.P16.gz43_227042
M00056409A:C03	ES 184	641687	1790.P21.gz43_227122
M00056409A:D03	ES 184	470462	1790.P23.gz43_227154
M00056409A:D06	ES 184	727633	1790.P24.gz43_227170
M00056409B:C12	ES 184	729784	1791.A03.gz43_227203
M00056409B:E07	ES 184	734253	1791.A05.gz43_227235
M00056409C:B04	ES 184	711493	1791.A06.gz43_227251
M00056410A:A04	ES 184	640744	1791.A19.gz43_227459
M00056410B:A09	ES 184	641383	1791.A23.gz43_227523
M00056410D:H03	ES 184	49703	1791.B14.gz43_227380
M00056411A:H06	ES 184	558049	1791.B17.gz43_227428
M00056411B:D01	ES 184	703978	1791.B19.gz43_227460
M00056412B:B08	ES 184	724773	1791.C22.gz43_227509
M00056413B:D07	ES 184	642637	1791.D18.gz43_227446
M00056413C:B06	ES 184	723951	1791.D24.gz43_227542
M00056414C:H08	ES 184	729899	1791.E18.gz43_227447
M00056415A:D03	ES 184	475797	1791.F01.gz43_227176
M00056415B:B10	ES 184	402471	1791.F03.gz43_227208
M00056416B:B11	ES 184	648170	1791.G01.gz43_227177
M00056416B:C09	ES 184	456544	1791.G02.gz43_227193
M00056416B:H01	ES 184	727090	1791.G04.gz43_227225
M00056416D:C08	ES 184	729199	1791.G12.gz43_227353
M00056416D:D12	ES 184	435349	1791.G13.gz43_227369
M00056416D:H10	ES 184	728986	1791.G18.gz43_227449
M00056417A:E08	ES 184	733484	1791.G23.gz43_227529
M00056417B:D05	ES 184	642170	1791.H05.gz43_227242
M00056417C:G10	ES 184	725408	1791.H14.gz43_227386
M00056417D:G09	ES 184	725407	1791.H20.gz43_227482
M00056418A:G01	ES 184	729579	1791.H24.gz43_227546
M00056418A:G09	ES 184	472684	1791.I01.gz43_227179
M00056419A:F08	ES 184	542957	1791.J07.gz43_227276
M00056419D:D02	ES 184	728440	1791.J24.gz43_227548

Table 13

CloneID	ES No	ClusterID	SequenceName
M00056419D:G04	ES 184	453762	1791.K03.gz43_227213
M00056420A:C01	ES 184	560957	1791.K04.gz43_227229
M00056420A:C12	ES 184	128749	1791.K05.gz43_227245
M00056420A:E09	ES 184	643646	1791.K07.gz43_227277
M00056420A:G11	ES 184	731390	1791.K10.gz43_227325
M00056420B:G05	ES 184	480377	1791.K12.gz43_227357
M00056420C:E08	ES 184	736507	1791.K21.gz43_227501
M00056420D:A09	ES 184	562581	1791.K23.gz43_227533
M00056421A:F12	ES 184	646146	1791.L05.gz43_227246
M00056421C:E06	ES 184	562137	1791.L11.gz43_227342
M00056421C:E12	ES 184	730178	1791.L12.gz43_227358
M00056421C:H01	ES 184	500253	1791.L14.gz43_227390
M00056422A:C12	ES 184	737019	1791.L22.gz43_227518
M00056422A:F07	ES 184	498194	1791.L24.gz43_227550
M00056422B:A08	ES 184	511149	1791.M03.gz43_227215
M00056422B:C12	ES 184	727845	1791.M04.gz43_227231
M00056422C:B10	ES 184	474965	1791.M15.gz43_227407
M00056422D:D10	ES 184	732987	1791.M22.gz43_227519
M00056423B:A12	ES 184	650437	1791.N06.gz43_227264
M00056423C:G05	ES 184	644723	1791.N14.gz43_227392
M00056423C:H03	ES 184	651053	1791.N15.gz43_227408
M00056423D:B06	ES 184	724024	1791.N17.gz43_227440
M00056423D:F10	ES 184	288134	1791.N24.gz43_227552
M00056423D:H07	ES 184	477718	1791.O02.gz43_227201
M00056424A:F05	ES 184	733490	1791.O08.gz43_227297
M00056424A:F12	ES 184	649722	1791.O09.gz43_227313
M00056424B:A11	ES 184	736893	1791.O13.gz43_227377
M00056424C:B10	ES 184	725408	1791.O19.gz43_227473
M00056424C:F02	ES 184	555359	1791.O21.gz43_227505
M00056424C:H04	ES 184	437450	1791.O24.gz43_227553
M00056424D:C08	ES 184	736632	1791.P05.gz43_227250
M00056424D:C12	ES 184	674574	1791.P06.gz43_227266
M00056425B:B02	ES 184	723963	1791.P13.gz43_227378
M00056425D:D08	ES 184	724220	1791.P22.gz43_227522
M00056425D:H01	ES 184	726768	1791.P23.gz43_227538
M00056426B:G12	ES 184	731158	1792.A09.gz43_227695
M00056426C:G05	ES 184	452981	1792.A11.gz43_227727
M00056427C:E06	ES 184	732827	1792.A21.gz43_227887
M00056428A:F10	ES 184	592186	1792.B09.gz43_227696
M00056428B:B01	ES 184	710362	1792.B11.gz43_227728
M00056429D:E02	ES 184	480005	1792.C11.gz43_227729
M00056432A:A01	ES 184	556115	1792.D06.gz43_227650
M00056432A:C08	ES 184	472073	1792.D08.gz43_227682
M00056433B:A09	ES 184	724400	1792.E03.gz43_227603



Table 13

CloneID	ES No	ClusterID	SequenceName
M00056433D:A09	ES 184	554398	1792.E12.gz43_227747
M00056433D:D08	ES 184	570928	1792.E14.gz43_227779
M00056434C:B01	ES 184	734287	1792.F06.gz43_227652
M00056435B:E06	ES 184	455972	1792.F20.gz43_227876
M00056435C:D04	ES 184	492089	1792.F22.gz43_227908
M00056476C:E05	ES 184	725238	1792.G10.gz43_227717
M00056476D:H11	ES 184	647375	1792.G16.gz43_227813
M00056477A:B11	ES 184	736751	1792.G17.gz43_227829
M00056477C:G09	ES 184	725454	1792.H12.gz43_227750
M00056478C:H01	ES 184	725584	1792.I07.gz43_227671
M00056478D:G02	ES 184	729584	1792.I12.gz43_227751
M00056479C:E04	ES 184	645476	1792.J05.gz43_227640
M00056480B:D06	ES 184	482461	1792.K02.gz43_227593
M00056481A:F02	ES 184	734646	1792.K19.gz43_227865
M00056482B:B11	ES 184	481594	1792.L18.gz43_227850
M00056482B:C09	ES 184	453713	1792.L20.gz43_227882
M00056482B:H02	ES 184	466795	1792.L22.gz43_227914
M00056483A:F10	ES 185	452618	1792.M09.gz43_227707
M00056483B:E04	ES 185	724183	1792.M13.gz43_227771
M00056483B:F04	ES 185	724390	1792.M14.gz43_227787
M00056483C:D06	ES 185	724183	1792.M20.gz43_227883
M00056483D:F06	ES 185	730282	1792.M24.gz43_227947
M00056484B:E11	ES 185	725210	1792.N12.gz43_227756
M00056484D:D01	ES 185	675299	1792.N18.gz43_227852
M00056484D:G08	ES 185	650940	1792.N21.gz43_227900
M00056485B:D11	ES 185	451404	1792.O04.gz43_227629
M00056486A:C12	ES 185	477296	1792.O16.gz43_227821
M00056486B:G02	ES 185	553983	1792.P01.gz43_227582
M00056486C:F04	ES 185	717743	1792.P05.gz43_227646
M00056486D:A12	ES 185	725006	1792.P07.gz43_227678
M00056486D:F04	ES 185	727948	1792.P10.gz43_227726
M00056487A:C10	ES 185	471931	1792.P11.gz43_227742
M00056487A:D01	ES 185	462687	1792.P12.gz43_227758
M00056487A:F05	ES 185	725348	1792.P17.gz43_227838
M00056487C:E03	ES 185	731820	1801.A04.gz43_227999
M00056487C:E04	ES 185	449291	1801.A05.gz43_228015
M00056488B:E04	ES 185	462266	1801.B03.gz43_227984
M00056488B:G10	ES 185	725434	1801.B05.gz43_228016
M00056488B:H04	ES 185	429191	1801.B06.gz43_228032
M00056491B:B09	ES 185	733006	1801.D01.gz43_227954
M00056491B:E02	ES 185	447785	1801.D02.gz43_227970
M00056491B:G05	ES 185	472485	1801.D04.gz43_228002
M00056491B:G08	ES 185	446191	1801.D05.gz43_228018

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CloneID	ES No	ClusterID	SequenceName
M00056492B:D06	ES 185	446928	1801.E04.gz43_228003
M00056495A:A07	ES 185	447658	1801.G03.gz43_227989
M00056495A:C02	ES 185	460690	1801.G05.gz43_228021
M00056496D:B12	ES 185	733151	1801.I01.gz43_227959
M00056496D:G03	ES 185	649202	1801.I05.gz43_228023
M00056497C:D05	ES 185	734261	1801.J01.gz43_227960
M00056497C:E01	ES 185	523753	1801.J02.gz43_227976
M00056497D:C11	ES 185	611604	1801.J05.gz43_228024
M00056498D:C01	ES 185	514142	1801.K01.gz43_227961
M00056499A:A04	ES 185	635951	1801.K03.gz43_227993
M00056499A:B10	ES 185	447002	1801.K05.gz43_228025
M00056500A:G12	ES 185	635951	1801.L05.gz43_228026
M00056501B:B09	ES 185	471232	1801.M01.gz43_227963
M00056501B:C07	ES 185	451383	1801.M02.gz43_227979
M00056503B:G11	ES 185	640116	1801.O06.gz43_228045
M00056504B:B01	ES 185	732598	1801.P04.gz43_228014
M00056504B:C03	ES 185	736665	1801.P05.gz43_228030
M00056567A:H06	ES 185	727410	1813.A13.gz43_229679
M00056568C:D02	ES 185	454560	1813.B14.gz43_229696
M00056570A:D09	ES 185	548893	1813.C22.gz43_229825
M00056572A:A04	ES 185	736194	1813.E06.gz43_229571
M00056572C:E03	ES 185	458186	1813.E22.gz43_229827
M00056573C:B09	ES 185	554557	1813.F20.gz43_229796
M00056576A:A04	ES 185	734043	1813.H05.gz43_229558
M00056576A:E01	ES 185	475757	1813.H08.gz43_229606
M00056576C:G01	ES 185	513540	1813.H22.gz43_229830
M00056577A:F10	ES 185	508210	1813.I06.gz43_229575
M00056577D:F08	ES 185	733664	1813.I20.gz43_229799
M00056578A:B05	ES 185	725759	1813.I22.gz43_229831
M00056578D:A02	ES 185	729281	1813.J10.gz43_229640
M00056581D:A08	ES 185	465446	1813.L13.gz43_229690
M00056583C:A05	ES 185	511351	1813.M13.gz43_229691
M00056584C:A06	ES 185	733970	1813.N10.gz43_229644
M00056585C:C08	ES 185	727260	1813.O07.gz43_229597
M00056586B:D10	ES 185	461062	1813.O24.gz43_229869
M00056631D:F06	ES 185	730897	1816.A24.gz43_231007
M00056632C:E03	ES 185	736325	1816.B20.gz43_230944
M00056632C:H08	ES 185	726494	1816.B22.gz43_230976
M00056632D:E02	ES 185	727944	1816.B24.gz43_231008
M00056633D:E05	ES 185	726104	1816.C19.gz43_230929
M00056634A:C06	ES 185	736778	1816.C21.gz43_230961
M00056634A:G11	ES 185	726448	1816.C23.gz43_230993
M00056636C:H05	ES 185	482868	1816.E19.gz43_230931
M00056636D:F03	ES 185	559684	1816.E21.gz43_230963

Table 13

CloneID	ES No	ClusterID	SequenceName
M00056637A:C08	ES 185	647808	1816.E24.gz43_231011
M00056639A:E07	ES 185	500233	1816.G20.gz43_230949
M00056639A:F11	ES 185	419711	1816.G22.gz43_230981
M00056639A:H12	ES 185	215249	1816.G23.gz43_230997
M00056640C:C01	ES 185	196279	1816.H21.gz43_230966
M00056641C:G09	ES 185	727332	1816.I19.gz43_230935
M00056642D:C05	ES 185	726818	1816.J20.gz43_230952
M00056644C:B03	ES 185	727078	1816.K19.gz43_230937
M00056645D:E06	ES 185	727108	1816.L19.gz43_230938
M00056645D:E08	ES 185	727110	1816.L20.gz43_230954
M00056645D:G01	ES 185	659700	1816.L22.gz43_230986
M00056646A:B01	ES 185	733375	1816.L24.gz43_231018
M00056646D:E03	ES 185	724083	1816.M20.gz43_230955
M00056646D:F07	ES 185	735392	1816.M22.gz43_230987
M00056647A:F06	ES 185	730596	1816.M24.gz43_231019
M00056648A:H05	ES 185	481930	1816.N19.gz43_230940
M00056648B:C08	ES 185	724565	1816.N20.gz43_230956
M00056648B:E09	ES 185	735322	1816.N23.gz43_231004
M00056650A:E01	ES 185	207530	1816.O20.gz43_230957
M00056650B:C11	ES 185	727175	1816.O23.gz43_231005
M00056651B:E12	ES 185	731966	1816.P23.gz43_231006
M00056652B:E09	ES 185	728936	1825.A14.gz43_231231
M00056653D:E07	ES 185	462409	1825.B19.gz43_231312
M00056653D:F07	ES 185	730570	1825.B21.gz43_231344
M00056654A:A07	ES 185	736415	1825.B24.gz43_231392
M00056656A:E01	ES 185	727108	1825.D21.gz43_231346
M00056657A:F06	ES 185	477718	1825.E16.gz43_231267
M00056657C:B04	ES 185	554713	1825.E20.gz43_231331
M00056658A:E11	ES 185	484987	1825.F14.gz43_231236
M00056658B:C03	ES 185	552927	1825.F16.gz43_231268
M00056658C:B12	ES 185	463741	1825.F22.gz43_231364
M00056660B:B06	ES 185	646504	1825.H19.gz43_231318
M00056660B:G12	ES 185	562984	1825.H21.gz43_231350
M00056660C:A06	ES 185	729732	1825.H22.gz43_231366
M00056661D:D06	ES 185	447074	1825.I21.gz43_231351
M00056663A:B02	ES 185	719620	1825.J16.gz43_231272
M00056663A:H09	ES 185	729675	1825.J20.gz43_231336
M00056664A:F09	ES 185	537451	1825.K17.gz43_231289
M00056664D:H06	ES 185	448104	1825.L19.gz43_231322
M00056665A:G08	ES 185	727343	1825.L23.gz43_231386
M00056666A:C04	ES 185	481592	1825.M14.gz43_231243
M00056666A:D09	ES 185	726953	1825.M16.gz43_231275
M00056666A:D10	ES 185	650973	1825.M17.gz43_231291
M00056667A:A12	ES 185	725607	1825.N13.gz43_231228

Table 13

CloneID	ES No	ClusterID	SequenceName
M00056667B:E04	ES 185	725381	1825.N17.gz43_231292
M00056667C:H01	ES 185	476477	1825.N21.gz43_231356
M00056667D:E05	ES 185	732351	1825.N22.gz43_231372
M00056668D:E03	ES 185	735605	1825.O14.gz43_231245
M00056669B:E10	ES 185	554597	1825.O24.gz43_231405
M00056670A:G02	ES 185	45934	1825.P13.gz43_231230
M00056670B:A12	ES 185	734184	1825.P14.gz43_231246
M00056670B:G05	ES 185	478458	1825.P17.gz43_231294
M00056672A:E05	ES 185	723914	1826.A13.gz43_231599
M00056672D:B08	ES 185	726722	1826.A21.gz43_231727
M00056672D:E04	ES 185	546121	1826.A23.gz43_231759
M00056674D:E09	ES 185	734622	1826.C14.gz43_231617
M00056675A:C02	ES 185	446575	1826.C18.gz43_231681
M00056675A:G02	ES 185	513156	1826.C23.gz43_231761
M00056676B:G12	ES 185	641777	1826.D16.gz43_231650
M00056676C:B04	ES 185	725899	1826.D18.gz43_231682
M00056678A:B02	ES 185	482722	1826.E13.gz43_231603
M00056678A:H05	ES 185	43352	1826.E16.gz43_231651
M00056678B:E11	ES 185	734828	1826.E17.gz43_231667
M00056678B:H02	ES 185	736246	1826.E20.gz43_231715
M00056678B:H06	ES 185	725266	1826.E21.gz43_231731
M00056678C:A12	ES 185	730664	1826.E22.gz43_231747
M00056679C:F11	ES 185	736194	1826.F22.gz43_231748
M00056681A:E06	ES 185	729387	1826.G22.gz43_231749
M00056681B:A11	ES 185	728791	1826.G24.gz43_231781
M00056682A:F05	ES 185	447489	1826.H17.gz43_231670
M00056683B:H04	ES 185	645925	1826.I14.gz43_231623
M00056683C:H10	ES 185	644445	1826.I17.gz43_231671
M00056683C:H11	ES 185	728659	1826.I18.gz43_231687
M00056684B:B12	ES 185	559610	1826.I24.gz43_231783
M00056685A:H11	ES 185	517274	1826.J17.gz43_231672
M00056685B:G04	ES 185	473238	1826.J20.gz43_231720
M00056685C:G07	ES 185	729205	1826.J24.gz43_231784
M00056686D:D07	ES 185	733789	1826.K18.gz43_231689
M00056686D:E04	ES 185	730829	1826.K20.gz43_231721
M00056689B:F03	ES 185	492094	1826.M19.gz43_231707
M00056689C:F05	ES 185	729413	1826.M24.gz43_231787
M00056692A:A05	ES 185	492629	1826.O21.gz43_231741
M00056693B:D07	ES 185	727965	1827.A02.gz43_231807
M00056693B:D11	ES 185	580601	1827.A04.gz43_231839
M00056693B:H03	ES 185	573733	1827.A09.gz43_231919
M00056693C:D12	ES 185	727968	1827.A13.gz43_231983
M00056693C:G06	ES 185	617813	1827.A14.gz43_231999
M00056693D:B02	ES 185	425396	1827.A15.gz43_232015

Table 13

CloneID	ES No	ClusterID	SequenceName
M00056693D:E12	ES 185	475942	1827.A18.gz43_232063
M00056694A:C05	ES 185	553483	1827.A22.gz43_232127
M00056694A:G02	ES 185	479997	1827.B02.gz43_231808
M00056694A:G03	ES 185	693869	1827.B03.gz43_231824
M00056694A:G11	ES 185	493830	1827.B04.gz43_231840
M00056694B:H10	ES 185	730375	1827.B08.gz43_231904
M00056695A:H09	ES 185	449701	1827.B21.gz43_232112
M00056695C:C04	ES 185	561301	1827.C01.gz43_231793
M00056695C:H08	ES 185	540618	1827.C06.gz43_231873
M00056695D:E05	ES 185	472837	1827.C10.gz43_231937
M00056695D:F01	ES 185	735974	1827.C11.gz43_231953
M00056696A:G12	ES 185	650542	1827.C16.gz43_232033
M00056696B:B03	ES 185	727506	1827.C17.gz43_232049
M00056696B:H01	ES 185	551096	1827.C24.gz43_232161
M00056697A:D02	ES 185	588059	1827.D11.gz43_231954
M00056697A:G03	ES 185	395596	1827.D13.gz43_231986
M00056697A:H10	ES 185	725084	1827.D16.gz43_232034
M00056697C:D11	ES 185	727845	1827.D21.gz43_232114
M00056697C:H10	ES 185	728556	1827.E01.gz43_231795
M00056697D:B09	ES 185	724714	1827.E04.gz43_231843
M00056697D:C09	ES 185	501030	1827.E06.gz43_231875
M00056697D:C12	ES 185	462687	1827.E07.gz43_231891
M00056698A:A07	ES 185	530656	1827.E10.gz43_231939
M00056698B:E10	ES 185	540618	1827.E17.gz43_232051
M00056698D:E11	ES 185	737109	1827.F04.gz43_231844
M00056698D:G09	ES 185	477366	1827.F06.gz43_231876
M00056699A:C07	ES 185	454844	1827.F10.gz43_231940
M00056699A:D08	ES 185	452662	1827.F11.gz43_231956
M00056699A:E08	ES 185	672032	1827.F12.gz43_231972
M00056699B:A05	ES 185	730266	1827.F15.gz43_232020
M00056699B:G04	ES 185	641072	1827.F21.gz43_232116
M00056699C:C02	ES 185	727649	1827.F24.gz43_232164
M00056699C:F09	ES 185	728196	1827.G02.gz43_231813
M00056699C:G11	ES 185	395604	1827.G04.gz43_231845
M00056699D:C09	ES 186	567122	1827.G07.gz43_231893
M00056700A:F12	ES 186	728300	1827.G14.gz43_232005
M00056700A:G05	ES 186	446607	1827.G16.gz43_232037
M00056700B:D02	ES 186	727151	1827.G17.gz43_232053
M00056700D:H07	ES 186	732770	1827.H10.gz43_231942
M00056701A:A02	ES 186	496084	1827.H12.gz43_231974
M00056701A:G09	ES 186	734264	1827.H16.gz43_232038
M00056701B:D02	ES 186	631056	1827.H18.gz43_232070
M00056701B:D06	ES 186	724489	1827.H19.gz43_232086

Table 13

CloneID	ES No	ClusterID	SequenceName
M00056701C:F08	ES 186	728196	1827.H24.gz43_232166
M00056701C:G09	ES 186	640458	1827.I01.gz43_231799
M00056701D:C03	ES 186	644354	1827.I02.gz43_231815
M00056701D:D04	ES 186	727948	1827.I06.gz43_231879
M00056701D:G03	ES 186	553140	1827.I07.gz43_231895
M00056701D:G07	ES 186	724059	1827.I08.gz43_231911
M00056701D:H12	ES 186	550454	1827.I09.gz43_231927
M00056702C:A10	ES 186	735676	1827.I17.gz43_232055
M00056702C:H02	ES 186	448698	1827.I23.gz43_232151
M00056702D:G03	ES 186	735834	1827.J04.gz43_231848
M00056703A:G01	ES 186	651050	1827.J09.gz43_231928
M00056703B:A04	ES 186	447624	1827.J13.gz43_231992
M00056703B:D07	ES 186	560678	1827.J16.gz43_232040
M00056703C:F04	ES 186	650136	1827.K01.gz43_231801
M00056703D:F08	ES 186	649927	1827.K06.gz43_231881
M00056704A:B05	ES 186	403671	1827.K08.gz43_231913
M00056704A:H08	ES 186	728552	1827.K13.gz43_231993
M00056704B:C02	ES 186	727760	1827.K14.gz43_232009
M00056704C:C10	ES 186	451183	1827.K18.gz43_232073
M00056704D:H10	ES 186	288801	1827.L01.gz43_231802
M00056705A:B12	ES 186	553805	1827.L03.gz43_231834
M00056705A:D02	ES 186	726852	1827.L04.gz43_231850
M00056705B:A12	ES 186	728768	1827.L09.gz43_231930
M00056705B:D10	ES 186	83388	1827.L10.gz43_231946
M00056706A:B03	ES 186	528981	1827.L24.gz43_232170
M00056706A:B05	ES 186	648777	1827.M01.gz43_231803
M00056706A:E09	ES 186	419465	1827.M02.gz43_231819
M00056706B:C02	ES 186	449752	1827.M06.gz43_231883
M00056706B:C07	ES 186	736100	1827.M07.gz43_231899
M00056706B:D04	ES 186	595181	1827.M08.gz43_231915
M00056706C:A07	ES 186	584693	1827.M10.gz43_231947
M00056706C:B12	ES 186	728898	1827.M11.gz43_231963
M00056706C:D05	ES 186	733064	1827.M13.gz43_231995
M00056706C:G01	ES 186	551450	1827.M18.gz43_232075
M00056707A:G11	ES 186	626791	1827.N03.gz43_231836
M00056707B:E02	ES 186	649106	1827.N06.gz43_231884
M00056707B:F06	ES 186	736276	1827.N09.gz43_231932
M00056707C:B04	ES 186	427486	1827.N12.gz43_231980
M00056707C:E01	ES 186	552430	1827.N15.gz43_232028
M00056707C:E03	ES 186	730639	1827.N16.gz43_232044
M00056707C:F10	ES 186	728768	1827.N17.gz43_232060
M00056708B:B09	ES 186	736579	1827.O12.gz43_231981
M00056708B:D03	ES 186	607202	1827.O13.gz43_231997
M00056708B:F06	ES 186	733040	1827.O18.gz43_232077

Table 13

CloneID	ES No	ClusterID	SequenceName
M00056708C:F06	ES 186	449629	1827.P01.gz43_231806
M00056708C:F11	ES 186	558317	1827.P02.gz43_231822
M00056708D:B03	ES 186	728892	1827.P05.gz43_231870
M00056708D:D10	ES 186	730463	1827.P06.gz43_231886
M00056708D:H06	ES 186	473433	1827.P13.gz43_231998
M00056709A:A05	ES 186	454087	1827.P14.gz43_232014
M00056709A:H11	ES 186	259218	1827.P18.gz43_232078
M00056709C:F06	ES 186	729428	1828.A01.gz43_232175
M00056709D:D05	ES 186	584179	1828.A05.gz43_232239
M00056709D:E12	ES 186	455297	1828.A08.gz43_232287
M00056710B:F05	ES 186	728273	1828.A23.gz43_232527
M00056710B:G12	ES 186	724006	1828.B03.gz43_232208
M00056710D:A02	ES 186	475797	1828.B09.gz43_232304
M00056710D:C05	ES 186	707609	1828.B10.gz43_232320
M00056710D:H04	ES 186	727491	1828.B14.gz43_232384
M00056711A:A09	ES 186	641287	1828.B15.gz43_232400
M00056711B:B04	ES 186	485020	1828.B18.gz43_232448
M00056711C:F10	ES 186	736551	1828.C01.gz43_232177
M00056712B:B11	ES 186	728897	1828.C19.gz43_232465
M00056712B:F02	ES 186	734453	1828.C23.gz43_232529
M00056713A:B09	ES 186	461990	1828.D13.gz43_232370
M00056713A:F05	ES 186	48619	1828.D15.gz43_232402
M00056713B:B05	ES 186	727410	1828.D17.gz43_232434
M00056713C:A10	ES 186	732006	1828.D23.gz43_232530
M00056714A:A10	ES 186	734086	1828.E11.gz43_232339
M00056714A:B02	ES 186	735047	1828.E13.gz43_232371
M00056714A:B09	ES 186	728929	1828.E15.gz43_232403
M00056714A:E12	ES 186	448217	1828.E19.gz43_232467
M00056714A:H06	ES 186	728445	1828.E22.gz43_232515
M00056714B:B06	ES 186	728966	1828.E24.gz43_232547
M00056714B:C12	ES 186	724050	1828.F01.gz43_232180
M00056714D:A11	ES 186	729813	1828.F11.gz43_232340
M00056714D:E08	ES 186	505858	1828.F12.gz43_232356
M00056714D:H07	ES 186	448217	1828.F14.gz43_232388
M00056715C:B07	ES 186	558544	1828.G05.gz43_232245
M00056716B:F12	ES 186	728182	1828.H02.gz43_232198
M00056716C:B06	ES 186	630516	1828.H04.gz43_232230
M00056718A:F10	ES 186	728925	1828.I09.gz43_232311
M00056718A:H05	ES 186	728528	1828.I11.gz43_232343
M00056718B:C02	ES 186	451972	1828.I15.gz43_232407
M00056718C:B01	ES 186	646309	1828.I19.gz43_232471
M00056718D:D12	ES 186	449585	1828.I23.gz43_232535
M00056719B:D02	ES 186	727946	1828.J09.gz43_232312
M00056719B:G04	ES 186	732770	1828.J11.gz43_232344

Table 13

CloneID	ES No	ClusterID	SequenceName
M00056719C:B10	ES 186	486363	1828.J18.gz43_232456
M00056719C:F06	ES 186	728303	1828.J19.gz43_232472
M00056720B:D05	ES 186	730233	1828.K06.gz43_232265
M00056721A:C07	ES 186	727749	1828.K13.gz43_232377
M00056721B:D03	ES 186	728002	1828.K19.gz43_232473
M00056721C:E05	ES 186	732351	1828.L01.gz43_232186
M00056721C:H01	ES 186	555763	1828.L03.gz43_232218
M00056721D:D01	ES 186	734622	1828.L07.gz43_232282
M00056721D:F12	ES 186	728178	1828.L10.gz43_232330
M00056722A:E10	ES 186	598746	1828.L13.gz43_232378
M00056722A:F08	ES 186	485899	1828.L14.gz43_232394
M00056722B:E09	ES 186	732242	1828.L19.gz43_232474
M00056722C:C09	ES 186	730627	1828.M01.gz43_232187
M00056722C:D11	ES 186	727878	1828.M02.gz43_232203
M00056723C:C09	ES 186	462687	1828.N02.gz43_232204
M00056723C:E01	ES 186	553294	1828.N05.gz43_232252
M00056723C:G03	ES 186	734990	1828.N08.gz43_232300
M00056724B:E11	ES 186	473640	1828.N20.gz43_232492
M00056724B:G03	ES 186	447150	1828.N22.gz43_232524
M00056724C:H11	ES 186	726576	1828.O05.gz43_232253
M00056725A:E02	ES 186	728061	1828.O13.gz43_232381
M00056725C:A03	ES 186	727480	1828.O21.gz43_232509
M00056725C:H06	ES 186	728627	1828.P03.gz43_232222
M00056726A:C12	ES 186	735362	1828.P07.gz43_232286
M00056726A:F08	ES 186	449210	1828.P08.gz43_232302
M00056726B:H06	ES 186	447634	1828.P10.gz43_232334
M00056726D:B05	ES 186	692627	1828.P17.gz43_232446
M00056726D:G08	ES 186	509678	1828.P21.gz43_232510
M00056746D:D06	ES 186	729206	1838.B03.gz43_232976
M00056746D:E09	ES 186	458940	1838.B05.gz43_233008
M00056747D:A03	ES 186	529356	1838.C01.gz43_232945
M00056750B:H03	ES 186	735464	1838.E03.gz43_232979
M00056753A:G01	ES 186	552613	1838.G02.gz43_232965
M00056753B:B09	ES 186	728936	1838.G06.gz43_233029
M00056755B:E07	ES 186	728464	1838.I05.gz43_233015
M00056756C:D06	ES 186	736035	1838.J03.gz43_232984
M00056756C:E10	ES 186	646713	1838.J04.gz43_233000
M00056758C:B08	ES 186	730178	1838.K05.gz43_233017
M00056759C:C04	ES 186	736210	1838.L03.gz43_232986
M00056762B:D06	ES 186	481614	1838.N05.gz43_233020
M00056763B:G04	ES 186	697527	1838.O06.gz43_233037
M00056764C:A02	ES 186	551693	1838.P01.gz43_232958
M00056766D:G09	ES 186	728454	1839.A01.gz43_233327
M00056767A:F02	ES 186	730858	1839.A07.gz43_233423



Table 13

CloneID	ES No	ClusterID	SequenceName
M00056767A:F12	ES 186	711325	1839.A08.gz43_233439
M00056767B:C01	ES 186	727737	1839.A11.gz43_233487
M00056767B:G08	ES 186	736686	1839.A13.gz43_233519
M00056767C:A09	ES 186	549801	1839.A14.gz43_233535
M00056768A:C03	ES 186	730607	1839.A17.gz43_233583
M00056768A:C10	ES 186	728487	1839.A18.gz43_233599
M00056768B:F07	ES 186	730253	1839.A21.gz43_233647
M00056768D:A09	ES 186	736773	1839.B03.gz43_233360
M00056769C:C03	ES 186	504513	1839.B09.gz43_233456
M00056770C:A07	ES 186	641968	1839.B15.gz43_233552
M00056771A:F03	ES 186	732345	1839.B23.gz43_233680
M00056771B:F03	ES 186	552432	1839.C06.gz43_233409
M00056771C:G06	ES 186	640382	1839.C13.gz43_233521
M00056771D:D10	ES 186	726229	1839.C18.gz43_233601
M00056772A:C08	ES 186	691229	1839.C22.gz43_233665
M00056772A:D03	ES 186	726699	1839.C23.gz43_233681
M00056773A:A04	ES 186	735071	1839.D18.gz43_233602
M00056773A:C04	ES 186	735872	1839.D21.gz43_233650
M00056773A:G10	ES 186	727366	1839.D22.gz43_233666
M00056773B:G12	ES 186	711797	1839.E03.gz43_233363
M00056773C:C09	ES 186	510596	1839.E05.gz43_233395
M00056773C:F12	ES 186	135593	1839.E08.gz43_233443
M00056774B:G06	ES 186	726825	1839.E19.gz43_233619
M00056774C:G03	ES 186	728350	1839.E22.gz43_233667
M00056774D:B02	ES 186	631038	1839.E24.gz43_233699
M00056774D:F06	ES 186	734724	1839.F04.gz43_233380
M00056775A:A05	ES 186	727436	1839.F05.gz43_233396
M00056775B:H07	ES 186	477053	1839.F12.gz43_233508
M00056776A:G04	ES 186	728464	1839.G06.gz43_233413
M00056776D:B02	ES 186	523868	1839.G18.gz43_233605
M00056776D:H03	ES 186	642079	1839.G22.gz43_233669
M00056777A:A03	ES 186	730029	1839.G23.gz43_233685
M00056777D:D04	ES 186	730484	1839.H14.gz43_233542
M00056778C:G08	ES 186	609459	1839.H24.gz43_233702
M00056780B:E06	ES 186	724183	1839.J04.gz43_233384
M00056780B:H04	ES 186	493193	1839.J09.gz43_233464
M00056780C:H12	ES 186	647991	1839.J14.gz43_233544
M00056780D:G05	ES 186	727216	1839.J19.gz43_233624
M00056780D:H10	ES 186	724722	1839.J22.gz43_233672
M00056781A:C05	ES 186	513156	1839.J23.gz43_233688
M00056781A:D02	ES 186	482788	1839.J24.gz43_233704
M00056781A:E06	ES 186	730505	1839.K02.gz43_233353
M00056781B:C03	ES 186	733744	1839.K07.gz43_233433
M00056781B:C05	ES 186	639178	1839.K08.gz43_233449

Table 13

CloneID	ES No	ClusterID	SequenceName
M00056781B:E01	ES 186	728133	1839.K09.gz43_233465
M00056781B:F05	ES 186	727005	1839.K10.gz43_233481
M00056782B:G05	ES 186	449010	1839.L06.gz43_233418
M00056782B:H11	ES 186	643522	1839.L07.gz43_233434
M00056782D:F02	ES 186	483549	1839.L13.gz43_233530
M00056782D:F08	ES 186	490393	1839.L14.gz43_233546
M00056782D:F10	ES 186	726261	1839.L15.gz43_233562
M00056783A:C08	ES 187	577305	1839.L18.gz43_233610
M00056783B:B01	ES 187	47461	1839.L19.gz43_233626
M00056783C:D01	ES 187	591449	1839.M01.gz43_233339
M00056783C:E03	ES 187	730352	1839.M04.gz43_233387
M00056783D:A02	ES 187	460023	1839.M06.gz43_233419
M00056783D:B07	ES 187	556458	1839.M07.gz43_233435
M00056784B:A01	ES 187	733891	1839.M15.gz43_233563
M00056784B:C02	ES 187	730296	1839.M16.gz43_233579
M00056784B:D06	ES 187	733149	1839.M17.gz43_233595
M00056784C:C06	ES 187	725784	1839.M22.gz43_233675
M00056784D:C06	ES 187	675768	1839.N01.gz43_233340
M00056784D:G10	ES 187	726344	1839.N03.gz43_233372
M00056785A:C12	ES 187	646688	1839.N05.gz43_233404
M00056785A:G06	ES 187	228118	1839.N07.gz43_233436
M00056785B:B07	ES 187	730845	1839.N12.gz43_233516
M00056785C:B09	ES 187	643968	1839.N14.gz43_233548
M00056785D:C09	ES 187	550780	1839.N19.gz43_233628
M00056785D:G07	ES 187	730592	1839.N24.gz43_233708
M00056786D:A03	ES 187	730022	1839.O15.gz43_233565
M00056787B:C07	ES 187	577305	1839.P01.gz43_233342
M00056787C:B04	ES 187	724383	1839.P08.gz43_233454
M00056787C:G01	ES 187	726384	1839.P12.gz43_233518
M00056788A:D06	ES 187	606076	1839.P21.gz43_233662
M00056871C:D05	ES 187	735801	1852.A13.gz43_235742
M00056873A:H06	ES 187	735412	1852.B17.gz43_235807
M00056873B:C09	ES 187	726408	1852.B19.gz43_235839
M00056874C:D05	ES 187	730059	1852.C19.gz43_235840
M00056875D:C04	ES 187	729981	1852.D16.gz43_235793
M00056875D:E09	ES 187	727602	1852.D18.gz43_235825
M00056875D:H12	ES 187	733040	1852.D21.gz43_235873
M00056876A:C08	ES 187	724187	1852.D23.gz43_235905
M00056876A:E02	ES 187	730152	1852.D24.gz43_235921
M00056876C:B02	ES 187	481641	1852.E14.gz43_235762
M00056876C:G10	ES 187	732837	1852.E16.gz43_235794
M00056877B:H09	ES 187	488349	1852.F14.gz43_235763
M00056877C:D11	ES 187	727975	1852.F15.gz43_235779

Table 13

CloneID	ES No	ClusterID	SequenceName
M00056877C:G12	ES 187	655327	1852.F19.gz43_235843
M00056877C:H03	ES 187	730441	1852.F20.gz43_235859
M00056879A:D12	ES 187	732752	1852.G13.gz43_235748
M00056879B:H11	ES 187	730336	1852.G24.gz43_235924
M00056879D:D01	ES 187	472704	1852.H13.gz43_235749
M00056881A:A10	ES 187	649299	1852.I13.gz43_235750
M00056881A:C02	ES 187	735096	1852.I14.gz43_235766
M00056881A:H02	ES 187	639950	1852.I16.gz43_235798
M00056881B:G04	ES 187	730301	1852.I22.gz43_235894
M00056882B:E12	ES 187	594434	1852.J14.gz43_235767
M00056882D:A06	ES 187	471931	1852.J22.gz43_235895
M00056883D:A07	ES 187	732712	1852.K15.gz43_235784
M00056883D:F07	ES 187	732872	1852.K21.gz43_235880
M00056884C:H08	ES 187	550673	1852.L14.gz43_235769
M00056884C:H11	ES 187	472307	1852.L15.gz43_235785
M00056884D:C07	ES 187	724517	1852.L16.gz43_235801
M00056884D:D06	ES 187	561396	1852.L18.gz43_235833
M00056885A:D12	ES 187	730106	1852.L23.gz43_235913
M00056885D:D01	ES 187	644843	1852.M17.gz43_235818
M00056886A:A09	ES 187	732872	1852.M19.gz43_235850
M00056886A:C11	ES 187	735326	1852.M21.gz43_235882
M00056886B:B10	ES 187	650944	1852.N13.gz43_235755
M00056886B:C05	ES 187	735672	1852.N14.gz43_235771
M00056886B:H02	ES 187	724223	1852.N17.gz43_235819
M00056886C:D02	ES 187	473512	1852.N19.gz43_235851
M00056886C:D11	ES 187	451184	1852.N20.gz43_235867
M00056887A:E01	ES 187	729087	1852.N23.gz43_235915
M00056887D:H01	ES 187	730195	1852.O17.gz43_235820
M00056888A:H04	ES 187	649030	1852.O24.gz43_235932
M00056890A:D05	ES 187	450963	1861.A06.gz43_236014
M00056891A:G11	ES 187	732315	1861.A24.gz43_236302
M00056891C:H08	ES 187	730393	1861.B08.gz43_236047
M00056892B:C09	ES 187	479572	1861.B18.gz43_236207
M00056893B:G12	ES 187	724773	1861.C16.gz43_236176
M00056893C:A02	ES 187	728640	1861.C17.gz43_236192
M00056895B:F12	ES 187	727596	1861.E03.gz43_235970
M00056895C:E11	ES 187	494393	1861.E07.gz43_236034
M00056895D:G01	ES 187	725258	1861.E14.gz43_236146
M00056896A:C01	ES 187	735834	1861.E18.gz43_236210
M00056898C:B06	ES 187	676221	1861.G10.gz43_236084
M00056898D:D11	ES 187	730760	1861.G17.gz43_236196
M00056898D:H09	ES 187	729060	1861.G20.gz43_236244
M00056899A:A11	ES 187	732676	1861.G22.gz43_236276
M00056899B:D02	ES 187	732244	1861.H04.gz43_235989

Table 13

CloneID	ES No	ClusterID	SequenceName
M00056899D:B06	ES 187	448368	1861.H12.gz43_236117
M00056900B:D01	ES 187	656667	1861.H21.gz43_236261
M00056900B:F07	ES 187	730296	1861.H24.gz43_236309
M00056900C:B12	ES 187	562345	1861.I04.gz43_235990
M00056901B:C03	ES 187	730608	1861.I16.gz43_236182
M00056902A:G12	ES 187	557525	1861.J14.gz43_236151
M00056902D:H09	ES 187	489001	1861.K12.gz43_236120
M00056903A:C08	ES 187	642897	1861.K16.gz43_236184
M00056903A:F03	ES 187	733425	1861.K18.gz43_236216
M00056903B:D09	ES 187	453001	1861.K24.gz43_236312
M00056905A:H04	ES 187	732486	1861.M12.gz43_236122
M00056906D:D11	ES 187	639223	1861.N10.gz43_236091
M00056908B:D02	ES 187	548275	1861.N16.gz43_236187
M00056908D:A11	ES 187	725451	1861.N24.gz43_236315
M00056909B:E11	ES 187	648774	1861.O11.gz43_236108
M00056910A:G05	ES 187	551602	1861.P02.gz43_235965
M00056910B:F01	ES 187	472226	1861.P04.gz43_235997
M00056911B:A01	ES 187	732653	1861.P19.gz43_236237
M00056934A:A12	ES 187	729809	1863.A01.gz43_236702
M00056934A:E07	ES 187	446820	1863.A03.gz43_236734
M00056934C:C04	ES 187	492893	1863.A08.gz43_236814
M00056934C:G09	ES 187	555478	1863.A10.gz43_236846
M00056935A:C02	ES 187	731355	1863.A18.gz43_236974
M00056935A:F04	ES 187	735484	1863.A21.gz43_237022
M00056935C:G08	ES 187	726825	1863.B11.gz43_236863
M00056936C:C06	ES 187	524706	1863.B24.gz43_237071
M00056936C:E04	ES 187	730851	1863.C01.gz43_236704
M00056936C:F11	ES 187	77737	1863.C02.gz43_236720
M00056937C:H08	ES 187	485880	1863.C24.gz43_237072
M00056938A:H09	ES 187	451624	1863.D08.gz43_236817
M00056938B:C06	ES 187	725638	1863.D11.gz43_236865
M00056938B:C09	ES 187	733144	1863.D12.gz43_236881
M00056938B:H08	ES 187	731216	1863.D15.gz43_236929
M00056938C:F10	ES 187	735306	1863.D20.gz43_237009
M00056939A:C01	ES 187	734151	1863.E03.gz43_236738
M00056939B:E05	ES 187	642528	1863.E12.gz43_236882
M00056939B:E10	ES 187	735477	1863.E13.gz43_236898
M00056939D:B02	ES 187	171511	1863.E21.gz43_237026
M00056940B:B11	ES 187	732886	1863.F12.gz43_236883
M00056940B:G07	ES 187	730564	1863.F14.gz43_236915
M00056940C:E05	ES 187	730815	1863.F17.gz43_236963
M00056941B:B02	ES 187	616541	1863.G10.gz43_236852
M00056941B:G08	ES 187	730375	1863.G18.gz43_236980
M00056941C:F07	ES 187	732491	1863.G21.gz43_237028

Table 13

CloneID	ES No	ClusterID	SequenceName
M00056941D:A05	ES 187	730452	1863.G24.gz43_237076
M00056941D:D07	ES 187	727596	1863.H01.gz43_236709
M00056941D:G05	ES 187	456183	1863.H03.gz43_236741
M00056941D:H01	ES 187	724162	1863.H04.gz43_236757
M00056942B:F04	ES 187	485183	1863.H09.gz43_236837
M00056942C:A12	ES 187	724286	1863.H12.gz43_236885
M00056942C:B12	ES 187	731162	1863.H14.gz43_236917
M00056942C:C06	ES 187	733151	1863.H15.gz43_236933
M00056942C:F11	ES 187	732756	1863.H17.gz43_236965
M00056942D:D03	ES 187	727517	1863.H20.gz43_237013
M00056942D:D07	ES 187	728076	1863.H21.gz43_237029
M00056942D:D11	ES 187	511351	1863.H22.gz43_237045
M00056943A:B04	ES 187	734629	1863.I03.gz43_236742
M00056943A:F01	ES 187	729691	1863.I05.gz43_236774
M00056943C:A01	ES 187	468015	1863.I17.gz43_236966
M00056943D:B02	ES 187	729316	1863.I20.gz43_237014
M00056943D:H08	ES 187	731125	1863.I22.gz43_237046
M00056944A:D09	ES 187	733623	1863.J03.gz43_236743
M00056944B:C02	ES 187	448233	1863.J04.gz43_236759
M00056944C:B03	ES 187	735994	1863.J12.gz43_236887
M00056944D:A06	ES 187	733081	1863.J17.gz43_236967
M00056945A:B11	ES 187	651088	1863.K04.gz43_236760
M00056945A:F02	ES 187	646314	1863.K06.gz43_236792
M00056945C:A11	ES 187	724401	1863.K12.gz43_236888
M00056946A:F07	ES 187	736293	1863.L01.gz43_236713
M00056946A:G06	ES 187	638983	1863.L02.gz43_236729
M00056946C:B08	ES 187	552416	1863.L08.gz43_236825
M00056946D:G09	ES 187	555484	1863.L17.gz43_236969
M00056947A:C05	ES 187	551441	1863.L20.gz43_237017
M00056947C:B04	ES 187	736001	1863.M02.gz43_236730
M00056947D:F09	ES 187	736349	1863.M08.gz43_236826
M00056948A:D09	ES 187	736129	1863.M12.gz43_236890
M00056948B:B03	ES 187	449061	1863.M15.gz43_236938
M00056948B:D04	ES 187	600347	1863.M17.gz43_236970
M00056948B:G05	ES 187	467803	1863.M18.gz43_236986
M00056948B:H06	ES 187	490903	1863.M19.gz43_237002
M00056948C:F03	ES 187	733910	1863.N01.gz43_236715
M00056948D:A11	ES 187	733856	1863.N03.gz43_236747
M00056949A:A04	ES 187	500239	1863.N05.gz43_236779
M00056949D:D11	ES 187	461486	1863.O02.gz43_236732
M00056950A:F01	ES 187	685968	1863.O08.gz43_236828
M00056950A:H03	ES 187	410487	1863.O10.gz43_236860
M00056950B:F03	ES 187	560252	1863.O16.gz43_236956
M00056950D:F12	ES 187	731196	1863.P02.gz43_236733

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CloneID	ES No	ClusterID	SequenceName
M00056950D:H09	ES 187	727480	1863.P03.gz43_236749
M00056951B:B06	ES 187	488447	1863.P11.gz43_236877
M00056951B:F09	ES 187	448046	1863.P13.gz43_236909
M00056951C:A04	ES 187	735818	1863.P17.gz43_236973
M00056953B:F05	ES 187	516522	1864.B04.gz43_237135
M00056954C:C04	ES 187	556141	1864.C07.gz43_237184
M00056957B:F10	ES 187	553000	1864.E18.gz43_237362
M00056959C:B10	ES 187	642781	1864.G12.gz43_237268
M00056961C:C07	ES 187	736197	1864.I03.gz43_237126
M00056961D:G02	ES 187	656070	1864.I09.gz43_237222
M00056962D:F09	ES 187	736289	1864.I17.gz43_237350
M00056968C:C06	ES 187	731089	1864.M04.gz43_237146
M00056969A:B07	ES 187	731947	1864.M14.gz43_237306
M00056969A:C07	ES 187	448712	1864.M16.gz43_237338
M00056975A:H11	ES 187	728249	1873.A13.gz43_237662
M00056975B:E04	ES 187	735440	1873.A16.gz43_237710
M00056975C:F09	ES 187	477399	1873.A18.gz43_237742
M00056976C:F05	ES 187	734561	1873.B20.gz43_237775
M00056977A:C02	ES 187	733563	1873.C04.gz43_237520
M00056977A:H10	ES 187	482461	1873.C12.gz43_237648
M00056977B:B06	ES 187	613029	1873.C13.gz43_237664
M00056978A:A03	ES 187	734936	1873.D08.gz43_237585
M00056978A:H04	ES 187	730089	1873.D11.gz43_237633
M00056978B:G02	ES 187	641658	1873.D16.gz43_237713
M00056978D:A01	ES 188	733778	1873.D24.gz43_237841
M00056978D:B07	ES 188	735123	1873.E02.gz43_237490
M00056979B:D03	ES 188	731607	1873.E08.gz43_237586
M00056979B:E03	ES 188	725321	1873.E09.gz43_237602
M00056979C:D11	ES 188	648034	1873.E12.gz43_237650
M00056980A:H06	ES 188	732438	1873.F04.gz43_237523
M00056980D:E07	ES 188	727151	1873.F20.gz43_237779
M00056981D:H02	ES 188	732535	1873.G14.gz43_237684
M00056982D:B12	ES 188	724411	1873.H02.gz43_237493
M00056983D:C12	ES 188	650919	1873.H18.gz43_237749
M00056985A:D06	ES 188	729623	1873.I12.gz43_237654
M00056985A:G07	ES 188	552254	1873.I14.gz43_237686
M00056985B:G03	ES 188	557488	1873.I18.gz43_237750
M00056985C:C06	ES 188	731453	1873.I20.gz43_237782
M00056986A:E09	ES 188	732213	1873.J06.gz43_237559
M00056987A:C02	ES 188	731592	1873.J24.gz43_237847
M00056987C:D08	ES 188	555423	1873.K04.gz43_237528
M00056987D:A09	ES 188	731302	1873.K10.gz43_237624
M00056988A:B09	ES 188	723895	1873.K17.gz43_237736

Table 13

CloneID	ES No	ClusterID	SequenceName
M00056988A:F06	ES 188	642649	1873.K20.gz43_237784
M00056988B:A06	ES 188	731358	1873.K22.gz43_237816
M00056988C:D05	ES 188	703978	1873.L04.gz43_237529
M00056988D:F05	ES 188	732113	1873.L10.gz43_237625
M00056989C:H09	ES 188	639934	1873.M03.gz43_237514
M00056989D:A07	ES 188	731476	1873.M05.gz43_237546
M00056989D:F07	ES 188	728013	1873.M10.gz43_237626
M00056989D:H11	ES 188	731317	1873.M12.gz43_237658
M00056990B:B03	ES 188	729795	1873.M18.gz43_237754
M00056990B:H07	ES 188	642288	1873.M20.gz43_237786
M00056990C:E09	ES 188	735395	1873.N02.gz43_237499
M00056990D:C11	ES 188	725825	1873.N06.gz43_237563
M00056991C:H11	ES 188	406931	1873.N18.gz43_237755
M00056992A:E01	ES 188	471883	1873.N22.gz43_237819
M00056993A:B02	ES 188	550973	1873.O12.gz43_237660
M00056993A:B08	ES 188	731542	1873.O13.gz43_237676
M00056993D:C05	ES 188	662617	1873.P02.gz43_237501
M00056993D:F05	ES 188	732114	1873.P05.gz43_237549
M00056994B:H05	ES 188	736401	1873.P18.gz43_237757
M00056994C:B04	ES 188	572426	1873.P20.gz43_237789
M00056994C:C01	ES 188	483676	1873.P22.gz43_237821
M00056995C:H06	ES 188	631251	1874.A15.gz43_238078
M00056995D:C11	ES 188	731686	1874.A19.gz43_238142
M00056996D:A02	ES 188	731317	1874.B08.gz43_237967
M00056997A:H05	ES 188	550016	1874.B18.gz43_238127
M00056997B:C11	ES 188	559053	1874.B20.gz43_238159
M00056997D:B04	ES 188	737083	1874.C06.gz43_237936
M00056998C:B10	ES 188	456236	1874.D01.gz43_237857
M00056998D:H08	ES 188	726408	1874.D08.gz43_237969
M00056999A:G12	ES 188	734708	1874.D12.gz43_238033
M00056999B:D07	ES 188	726696	1874.D16.gz43_238097
M00057000A:A05	ES 188	733932	1874.E03.gz43_237890
M00057001D:F02	ES 188	448202	1874.F16.gz43_238099
M00057003D:F02	ES 188	734629	1874.H16.gz43_238101
M00057004B:D05	ES 188	497233	1874.H21.gz43_238181
M00057006A:G10	ES 188	730662	1874.J17.gz43_238119
M00057007B:G02	ES 188	561993	1874.K16.gz43_238104
M00057007C:A06	ES 188	736413	1874.K17.gz43_238120
M00057009C:B02	ES 188	732792	1874.N01.gz43_237867
M00057011C:H03	ES 188	724810	1874.P07.gz43_237965
M00057011D:F12	ES 188	733836	1874.P13.gz43_238061
M00057012A:D12	ES 188	556637	1874.P17.gz43_238125
M00057012D:G03	ES 188	732441	1875.A03.gz43_238270
M00057012D:G04	ES 188	733571	1875.A04.gz43_238286

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CloneID	ES No	ClusterID	SequenceName
M00057013B:H07	ES 188	481581	1875.A10.gz43_238382
M00057013C:E09	ES 188	726208	1875.A13.gz43_238430
M00057013C:H01	ES 188	733756	1875.A15.gz43_238462
M00057013D:E03	ES 188	558132	1875.A17.gz43_238494
M00057014A:B11	ES 188	512377	1875.A22.gz43_238574
M00057014B:A02	ES 188	556019	1875.B02.gz43_238255
M00057014B:B01	ES 188	478448	1875.B03.gz43_238271
M00057014B:B06	ES 188	451351	1875.B04.gz43_238287
M00057014C:C08	ES 188	728852	1875.B07.gz43_238335
M00057014C:E01	ES 188	733354	1875.B12.gz43_238415
M00057014C:E03	ES 188	730828	1875.B13.gz43_238431
M00057014D:E05	ES 188	619265	1875.B19.gz43_238527
M00057014D:G10	ES 188	733664	1875.B22.gz43_238575
M00057014D:H01	ES 188	557164	1875.B23.gz43_238591
M00057015A:E02	ES 188	732047	1875.C05.gz43_238304
M00057015A:G06	ES 188	487183	1875.C07.gz43_238336
M00057015A:H12	ES 188	732550	1875.C10.gz43_238384
M00057015B:E01	ES 188	484023	1875.C15.gz43_238464
M00057016A:B04	ES 188	734074	1875.C21.gz43_238560
M00057016A:G01	ES 188	494450	1875.C23.gz43_238592
M00057016B:A09	ES 188	733723	1875.D03.gz43_238273
M00057016B:C01	ES 188	554620	1875.D04.gz43_238289
M00057016B:E06	ES 188	734392	1875.D08.gz43_238353
M00057016B:H08	ES 188	474009	1875.D09.gz43_238369
M00057016C:B05	ES 188	733970	1875.D11.gz43_238401
M00057016C:E04	ES 188	731838	1875.D14.gz43_238449
M00057016C:E11	ES 188	689424	1875.D15.gz43_238465
M00057016D:B07	ES 188	703298	1875.D17.gz43_238497
M00057016D:H03	ES 188	640904	1875.D22.gz43_238577
M00057017A:A07	ES 188	452065	1875.D23.gz43_238593
M00057017A:F11	ES 188	570573	1875.E04.gz43_238290
M00057017A:G04	ES 188	538582	1875.E06.gz43_238322
M00057017C:E03	ES 188	559096	1875.E15.gz43_238466
M00057018A:C05	ES 188	734177	1875.E21.gz43_238562
M00057018C:F02	ES 188	732119	1875.F02.gz43_238259
M00057018D:B10	ES 188	734091	1875.F05.gz43_238307
M00057018D:E05	ES 188	557896	1875.F08.gz43_238355
M00057019A:G04	ES 188	626791	1875.F12.gz43_238419
M00057019C:C08	ES 188	455148	1875.F15.gz43_238467
M00057019C:E03	ES 188	558134	1875.F16.gz43_238483
M00057019D:C02	ES 188	649074	1875.F19.gz43_238531
M00057020A:F09	ES 188	639427	1875.F23.gz43_238595
M00057020D:A05	ES 188	483919	1875.G07.gz43_238340
M00057021B:B07	ES 188	477797	1875.G18.gz43_238516



Table 13

CloneID	ES No	ClusterID	SequenceName
M00057021D:F10	ES 188	212768	1875.G24.gz43_238612
M00057022B:A04	ES 188	729731	1875.H09.gz43_238373
M00057022B:F03	ES 188	639629	1875.H11.gz43_238405
M00057022B:H04	ES 188	559699	1875.H12.gz43_238421
M00057022C:D12	ES 188	726476	1875.H14.gz43_238453
M00057022D:E10	ES 188	554693	1875.H23.gz43_238597
M00057023A:H09	ES 188	726173	1875.I03.gz43_238278
M00057023D:D05	ES 188	390968	1875.I13.gz43_238438
M00057023D:D08	ES 188	466920	1875.I14.gz43_238454
M00057023D:E11	ES 188	616985	1875.I15.gz43_238470
M00057024A:D08	ES 188	727761	1875.I21.gz43_238566
M00057024B:A03	ES 188	735021	1875.I23.gz43_238598
M00057024B:A11	ES 188	726044	1875.I24.gz43_238614
M00057024B:F07	ES 188	733625	1875.J01.gz43_238247
M00057024C:A01	ES 188	670124	1875.J04.gz43_238295
M00057024C:G08	ES 188	551485	1875.J06.gz43_238327
M00057024D:D12	ES 188	735396	1875.J10.gz43_238391
M00057024D:H11	ES 188	728797	1875.J15.gz43_238471
M00057025C:A08	ES 188	724296	1875.K02.gz43_238264
M00057025C:D11	ES 188	655312	1875.K04.gz43_238296
M00057026C:H11	ES 188	733673	1875.K21.gz43_238568
M00057026D:A05	ES 188	732598	1875.K23.gz43_238600
M00057027B:B11	ES 188	651049	1875.L07.gz43_238345
M00057027B:E04	ES 188	89082	1875.L08.gz43_238361
M00057027B:F06	ES 188	731577	1875.L11.gz43_238409
M00057027D:A12	ES 188	432159	1875.L18.gz43_238521
M00057027D:D07	ES 188	733209	1875.L21.gz43_238569
M00057027D:G03	ES 188	728791	1875.L24.gz43_238617
M00057028B:B11	ES 188	730296	1875.M11.gz43_238410
M00057028D:D09	ES 188	554080	1875.M19.gz43_238538
M00057029A:C08	ES 188	495241	1875.M23.gz43_238602
M00057029B:G10	ES 188	735412	1875.N07.gz43_238347
M00057029D:A06	ES 188	732712	1875.N14.gz43_238459
M00057029D:F01	ES 188	733479	1875.N15.gz43_238475
M00057030B:B03	ES 188	425203	1875.N22.gz43_238587
M00057030B:F01	ES 188	735989	1875.N23.gz43_238603
M00057030C:A05	ES 188	562769	1875.N24.gz43_238619
M00057030C:B03	ES 188	461486	1875.O01.gz43_238252
M00057031A:G09	ES 188	594013	1875.O12.gz43_238428
M00057031A:H02	ES 188	471522	1875.O13.gz43_238444
M00057031B:A01	ES 188	561338	1875.O14.gz43_238460
M00057032A:C01	ES 188	512863	1875.P08.gz43_238365
M00057032A:F12	ES 188	642693	1875.P10.gz43_238397
M00057032D:A04	ES 188	736385	1875.P18.gz43_238525

Table 13

CloneID	ES No	ClusterID	SequenceName
M00057033A:D08	ES 188	479208	1875.P24.gz43_238621
M00057033C:B03	ES 188	468296	1876.A08.gz43_238734
M00057033D:F10	ES 188	456469	1876.A16.gz43_238862
M00057034B:B01	ES 188	735972	1876.A23.gz43_238974
M00057034C:A11	ES 188	735221	1876.A24.gz43_238990
M00057034C:G12	ES 188	736385	1876.B05.gz43_238687
M00057035C:E10	ES 188	452833	1876.C03.gz43_238656
M00057036A:C07	ES 188	557967	1876.C14.gz43_238832
M00057036B:G08	ES 188	483959	1876.C18.gz43_238896
M00057036D:B01	ES 188	729813	1876.C24.gz43_238992
M00057036D:E09	ES 188	554734	1876.D06.gz43_238705
M00057037D:E08	ES 188	727411	1876.D24.gz43_238993
M00057038A:H07	ES 188	473026	1876.E04.gz43_238674
M00057038C:B06	ES 188	728353	1876.E07.gz43_238722
M00057038C:G08	ES 188	454819	1876.E09.gz43_238754
M00057038D:A12	ES 188	735815	1876.E11.gz43_238786
M00057040B:F01	ES 188	483101	1876.F12.gz43_238803
M00057040D:H04	ES 188	736855	1876.F18.gz43_238899
M00057041D:B11	ES 188	546632	1876.G12.gz43_238804
M00057041D:C08	ES 188	492627	1876.G13.gz43_238820
M00057042B:A10	ES 188	727321	1876.G22.gz43_238964
M00057042D:E06	ES 188	736881	1876.H06.gz43_238709
M00057042D:G02	ES 188	733772	1876.H08.gz43_238741
M00057043A:G07	ES 188	732315	1876.H12.gz43_238805
M00057043C:H11	ES 188	638857	1876.H22.gz43_238965
M00057044C:B05	ES 188	735871	1876.I16.gz43_238870
M00057045A:C04	ES 188	734466	1876.J05.gz43_238695
M00057045D:D08	ES 188	645803	1876.J20.gz43_238935
M00057046A:F02	ES 188	732159	1876.K03.gz43_238664
M00057046A:G05	ES 188	668731	1876.K05.gz43_238696
M00057046C:E05	ES 188	732042	1876.K14.gz43_238840
M00057047C:C07	ES 188	725024	1876.L11.gz43_238793
M00057047D:E01	ES 188	643933	1876.L20.gz43_238937
M00057047D:H04	ES 188	735054	1876.L23.gz43_238985
M00057048C:E04	ES 188	481293	1876.M10.gz43_238778
M00057048C:H11	ES 188	558573	1876.M12.gz43_238810
M00057048D:H10	ES 188	732562	1876.M20.gz43_238938
M00057049D:F12	ES 188	732246	1876.N07.gz43_238731
M00057050B:F06	ES 188	737087	1876.N14.gz43_238843
M00057051B:E09	ES 188	466920	1876.O06.gz43_238716
M00057051D:F07	ES 188	732242	1876.O23.gz43_238988
M00057052D:A07	ES 189	708175	1876.P18.gz43_238909
M00057053A:A02	ES 189	645262	1885.A03.gz43_239038

Table 13

CloneID	ES No	ClusterID	SequenceName
M00057053A:D11	ES 189	446616	1885.A06.gz43_239086
M00057053C:B10	ES 189	732872	1885.A12.gz43_239182
M00057053C:G04	ES 189	733623	1885.A15.gz43_239230
M00057053D:D01	ES 189	677769	1885.A16.gz43_239246
M00057054A:B12	ES 189	729502	1885.A18.gz43_239278
M00057054A:D01	ES 189	736113	1885.A19.gz43_239294
M00057055B:D07	ES 189	726380	1885.B16.gz43_239247
M00057055B:E10	ES 189	730472	1885.B17.gz43_239263
M00057055B:F05	ES 189	567005	1885.B19.gz43_239295
M00057055C:F01	ES 189	729981	1885.C02.gz43_239024
M00057055C:H07	ES 189	728445	1885.C06.gz43_239088
M00057055D:D11	ES 189	725991	1885.C07.gz43_239104
M00057055D:F05	ES 189	733417	1885.C08.gz43_239120
M00057056B:C06	ES 189	134501	1885.C16.gz43_239248
M00057056B:D05	ES 189	455884	1885.C17.gz43_239264
M00057056B:D11	ES 189	731830	1885.C18.gz43_239280
M00057056B:E09	ES 189	735423	1885.C19.gz43_239296
M00057056B:F01	ES 189	735423	1885.C21.gz43_239328
M00057056C:G03	ES 189	734241	1885.D02.gz43_239025
M00057056D:F11	ES 189	732223	1885.D06.gz43_239089
M00057057A:G01	ES 189	654723	1885.D10.gz43_239153
M00057057B:E06	ES 189	422590	1885.D13.gz43_239201
M00057057B:E07	ES 189	471982	1885.D14.gz43_239217
M00057057B:G03	ES 189	736318	1885.D15.gz43_239233
M00057058D:F09	ES 189	647427	1885.E06.gz43_239090
M00057058D:G08	ES 189	451233	1885.E07.gz43_239106
M00057059A:B04	ES 189	731449	1885.E10.gz43_239154
M00057059B:F03	ES 189	597542	1885.E15.gz43_239234
M00057059C:A04	ES 189	614455	1885.E16.gz43_239250
M00057059C:E10	ES 189	502168	1885.E19.gz43_239298
M00057059C:H02	ES 189	620462	1885.E20.gz43_239314
M00057059D:A09	ES 189	476947	1885.E21.gz43_239330
M00057059D:H09	ES 189	735292	1885.F02.gz43_239027
M00057060A:C10	ES 189	473742	1885.F04.gz43_239059
M00057060B:D07	ES 189	552641	1885.F09.gz43_239139
M00057060B:E06	ES 189	449473	1885.F10.gz43_239155
M00057060C:D05	ES 189	731844	1885.F16.gz43_239251
M00057060D:C09	ES 189	450551	1885.F20.gz43_239315
M00057061A:F09	ES 189	735216	1885.F24.gz43_239379
M00057061A:H10	ES 189	641848	1885.G01.gz43_239012
M00057061B:F01	ES 189	449015	1885.G02.gz43_239028
M00057061B:F05	ES 189	594013	1885.G03.gz43_239044
M00057061B:H02	ES 189	733573	1885.G04.gz43_239060
M00057061C:D04	ES 189	595506	1885.G06.gz43_239092

Table 13

CloneID	ES No	ClusterID	SequenceName
M00057061D:D03	ES 189	736156	1885.G09.gz43_239140
M00057061D:F05	ES 189	452623	1885.G10.gz43_239156
M00057062B:H04	ES 189	447075	1885.G22.gz43_239348
M00057062D:D04	ES 189	723853	1885.H01.gz43_239013
M00057063A:C08	ES 189	728884	1885.H07.gz43_239109
M00057063B:F06	ES 189	736285	1885.H14.gz43_239221
M00057063C:C04	ES 189	736023	1885.H17.gz43_239269
M00057064B:H10	ES 189	481366	1885.I04.gz43_239062
M00057064C:F11	ES 189	541793	1885.I07.gz43_239110
M00057064D:C09	ES 189	402180	1885.I10.gz43_239158
M00057064D:G09	ES 189	729717	1885.I12.gz43_239190
M00057065B:D12	ES 189	723919	1885.I19.gz43_239302
M00057065C:B07	ES 189	420958	1885.I21.gz43_239334
M00057066A:A09	ES 189	422242	1885.J13.gz43_239207
M00057066B:A04	ES 189	727130	1885.J20.gz43_239319
M00057066C:B02	ES 189	572273	1885.J24.gz43_239383
M00057066D:B03	ES 189	558549	1885.K03.gz43_239048
M00057066D:E01	ES 189	627515	1885.K06.gz43_239096
M00057067B:C11	ES 189	550637	1885.K11.gz43_239176
M00057067B:H04	ES 189	449996	1885.K15.gz43_239240
M00057067C:D04	ES 189	736146	1885.K17.gz43_239272
M00057067C:H09	ES 189	730128	1885.K19.gz43_239304
M00057067D:F03	ES 189	472704	1885.K23.gz43_239368
M00057067D:H06	ES 189	726699	1885.L02.gz43_239033
M00057068A:C10	ES 189	736093	1885.L03.gz43_239049
M00057068A:E07	ES 189	73846	1885.L04.gz43_239065
M00057068A:F05	ES 189	559656	1885.L05.gz43_239081
M00057068A:F07	ES 189	730528	1885.L06.gz43_239097
M00057068A:G05	ES 189	736415	1885.L08.gz43_239129
M00057068D:B03	ES 189	724773	1885.L20.gz43_239321
M00057068D:C09	ES 189	455248	1885.L22.gz43_239353
M00057068D:E05	ES 189	736210	1885.L24.gz43_239385
M00057068D:F04	ES 189	554854	1885.M01.gz43_239018
M00057069A:F09	ES 189	560581	1885.M09.gz43_239146
M00057069A:H08	ES 189	732072	1885.M10.gz43_239162
M00057069B:A08	ES 189	453508	1885.M11.gz43_239178
M00057069B:D07	ES 189	656268	1885.M13.gz43_239210
M00057069B:E07	ES 189	465470	1885.M15.gz43_239242
M00057069D:H09	ES 189	730697	1885.N02.gz43_239035
M00057070A:B07	ES 189	556385	1885.N04.gz43_239067
M00057070C:H10	ES 189	706245	1885.N18.gz43_239291
M00057070D:B08	ES 189	735028	1885.N20.gz43_239323
M00057070D:G03	ES 189	649349	1885.N23.gz43_239371
M00057071A:A10	ES 189	731262	1885.O01.gz43_239020

Table 13

CloneID	ES No	ClusterID	SequenceName
M00057071A:B04	ES 189	624133	1885.O02.gz43_239036
M00057071C:G10	ES 189	469852	1885.O15.gz43_239244
M00057071D:E01	ES 189	447758	1885.O21.gz43_239340
M00057071D:G01	ES 189	732351	1885.O22.gz43_239356
M00057072A:C06	ES 189	456530	1885.P02.gz43_239037
M00057072A:G04	ES 189	448727	1885.P04.gz43_239069
M00057072B:E02	ES 189	422687	1885.P08.gz43_239133
M00057072C:A03	ES 189	452224	1885.P10.gz43_239165
M00057072C:A09	ES 189	735283	1885.P12.gz43_239197
M00057072C:C02	ES 189	734787	1885.P14.gz43_239229
M00057072C:H01	ES 189	631526	1885.P18.gz43_239293
M00057073A:B12	ES 189	620159	1885.P22.gz43_239357
M00057073D:H05	ES 189	732487	1886.A18.gz43_239662
M00057077A:A07	ES 189	630291	1886.C24.gz43_239760
M00057077B:B06	ES 189	639629	1886.D03.gz43_239425
M00057077B:D02	ES 189	726786	1886.D06.gz43_239473
M00057078A:E06	ES 189	450563	1886.D19.gz43_239681
M00057079A:F05	ES 189	556212	1886.E23.gz43_239746
M00057082C:G03	ES 189	368965	1886.H07.gz43_239493
M00057087B:A07	ES 189	733910	1886.L03.gz43_239433
M00057087B:G10	ES 189	727461	1886.L05.gz43_239465
M00057087D:B04	ES 189	734059	1886.L13.gz43_239593
M00057088B:E02	ES 189	731358	1886.M02.gz43_239418
M00057089B:D01	ES 189	538582	1886.M20.gz43_239706
M00057089D:E03	ES 189	731966	1886.M24.gz43_239770
M00057090A:B02	ES 189	473588	1886.N04.gz43_239451
M00057090A:C03	ES 189	727407	1886.N05.gz43_239467
M00057091D:F11	ES 189	732131	1886.O22.gz43_239740
M00057092A:H02	ES 189	729446	1886.P06.gz43_239485
M00057092C:A05	ES 189	419465	1886.P15.gz43_239629
M00057092C:B10	ES 189	729792	1886.P16.gz43_239645
M00057093C:A02	ES 189	553898	1887.A08.gz43_239903
M00057093C:E01	ES 189	736634	1887.A11.gz43_239951
M00057093D:A11	ES 189	557606	1887.A17.gz43_240047
M00057094B:D07	ES 189	533689	1887.B05.gz43_239856
M00057095A:F11	ES 189	735113	1887.B21.gz43_240112
M00057095B:G03	ES 189	732873	1887.C02.gz43_239809
M00057096B:C05	ES 189	477387	1887.C20.gz43_240097
M00057096B:E06	ES 189	730697	1887.C23.gz43_240145
M00057096C:B08	ES 189	731477	1887.D04.gz43_239842
M00057096D:H05	ES 189	457842	1887.D11.gz43_239954
M00057097B:E02	ES 189	729222	1887.D20.gz43_240098
M00057098A:A04	ES 189	560885	1887.E11.gz43_239955
M00057099A:C04	ES 189	644354	1887.F09.gz43_239924

Table 13

CloneID	ES No	ClusterID	SequenceName
M00057099A:H12	ES 189	645139	1887.F10.gz43_239940
M00057099B:A06	ES 189	654475	1887.F11.gz43_239956
M00057099B:D02	ES 189	733148	1887.F15.gz43_240020
M00057099B:H11	ES 189	630655	1887.F18.gz43_240068
M00057099C:A06	ES 189	733972	1887.F20.gz43_240100
M00057099D:D11	ES 189	732550	1887.G02.gz43_239813
M00057100C:F02	ES 189	735584	1887.G18.gz43_240069
M00057100C:F03	ES 189	559361	1887.G19.gz43_240085
M00057100D:B06	ES 189	736409	1887.H02.gz43_239814
M00057100D:E09	ES 189	735515	1887.H05.gz43_239862
M00057102A:F12	ES 189	485441	1887.I04.gz43_239847
M00057102B:E12	ES 189	543772	1887.I12.gz43_239975
M00057102D:C11	ES 189	452276	1887.I17.gz43_240055
M00057103A:F11	ES 189	650920	1887.I21.gz43_240119
M00057103A:G01	ES 189	737031	1887.I22.gz43_240135
M00057104A:H06	ES 189	448325	1887.J19.gz43_240088
M00057104D:A02	ES 189	731697	1887.K09.gz43_239929
M00057105C:C06	ES 189	516799	1887.L07.gz43_239898
M00057105C:G02	ES 189	734344	1887.L12.gz43_239978
M00057105D:C10	ES 189	733209	1887.L14.gz43_240010
M00057106A:H04	ES 189	678846	1887.M06.gz43_239883
M00057108B:A12	ES 189	693869	1887.N12.gz43_239980
M00057109A:B02	ES 189	729992	1887.O06.gz43_239885
M00057109A:F11	ES 189	732885	1887.O10.gz43_239949
M00057109A:H09	ES 189	733348	1887.O12.gz43_239981
M00057109C:D10	ES 189	732312	1887.O19.gz43_240093
M00057110A:A03	ES 189	729560	1887.O24.gz43_240173
M00057110A:E12	ES 189	651121	1887.P02.gz43_239822
M00057110C:A04	ES 189	638908	1887.P06.gz43_239886
M00057110C:B09	ES 189	736009	1887.P08.gz43_239918
M00057110D:E12	ES 189	736220	1887.P17.gz43_240062
M00057112A:C12	ES 189	415825	1888.A01.gz43_240175
M00057112D:G08	ES 189	724952	1888.A18.gz43_240447
M00057113A:A08	ES 189	733171	1888.A20.gz43_240479
M00057113B:F03	ES 189	551624	1888.A23.gz43_240527
M00057114C:E07	ES 189	735018	1888.B20.gz43_240480
M00057114C:F08	ES 189	728479	1888.B21.gz43_240496
M00057115B:G06	ES 189	734737	1888.C18.gz43_240449
M00057115C:B11	ES 189	643517	1888.C19.gz43_240465
M00057115D:C10	ES 189	733225	1888.D01.gz43_240178
M00057115D:D06	ES 189	732113	1888.D02.gz43_240194
M00057115D:F06	ES 189	602673	1888.D05.gz43_240242
M00057116A:B06	ES 189	732896	1888.D07.gz43_240274
M00057116C:H09	ES 189	732476	1888.D23.gz43_240530

Table 13

CloneID	ES No	ClusterID	SequenceName
M00057116D:B10	ES 189	474108	1888.D24.gz43_240546
M00057117D:H06	ES 189	733802	1888.E21.gz43_240499
M00057118B:B04	ES 189	602012	1888.F02.gz43_240196
M00057118B:E10	ES 189	553264	1888.F06.gz43_240260
M00057120A:D01	ES 189	555655	1888.G06.gz43_240261
M00057120B:E08	ES 189	730565	1888.G11.gz43_240341
M00057120C:B09	ES 189	453733	1888.G12.gz43_240357
M00057120C:F08	ES 189	609459	1888.G14.gz43_240389
M00057121B:H10	ES 189	553338	1888.H09.gz43_240310
M00057121C:E08	ES 189	552783	1888.H12.gz43_240358
M00057122A:A07	ES 189	639923	1888.H17.gz43_240438
M00057122A:C04	ES 189	647374	1888.H18.gz43_240454
M00057122A:C11	ES 189	733006	1888.H19.gz43_240470
M00057122B:F04	ES 189	656263	1888.H23.gz43_240534
M00057122C:H08	ES 190	418482	1888.I06.gz43_240263
M00057122D:A01	ES 190	733365	1888.I07.gz43_240279
M00057123A:F09	ES 190	732937	1888.I12.gz43_240359
M00057123A:H09	ES 190	729299	1888.I15.gz43_240407
M00057123C:D03	ES 190	569256	1888.I18.gz43_240455
M00057123D:F07	ES 190	734606	1888.I22.gz43_240519
M00057124A:G08	ES 190	736539	1888.J04.gz43_240232
M00057125A:A07	ES 190	726575	1888.J21.gz43_240504
M00057125A:A12	ES 190	449770	1888.J22.gz43_240520
M00057125A:F07	ES 190	727142	1888.J24.gz43_240552
M00057125C:B11	ES 190	736534	1888.K06.gz43_240265
M00057125C:E02	ES 190	730122	1888.K10.gz43_240329
M00057125D:B02	ES 190	542490	1888.K12.gz43_240361
M00057125D:B09	ES 190	729519	1888.K13.gz43_240377
M00057126C:C05	ES 190	662617	1888.K23.gz43_240537
M00057126D:A04	ES 190	568632	1888.L03.gz43_240218
M00057127A:E10	ES 190	553087	1888.L12.gz43_240362
M00057127A:H10	ES 190	735959	1888.L15.gz43_240410
M00057127B:D10	ES 190	454961	1888.L18.gz43_240458
M00057127C:F03	ES 190	447692	1888.L24.gz43_240554
M00057128A:B04	ES 190	556867	1888.M08.gz43_240299
M00057128C:H02	ES 190	735514	1888.M24.gz43_240555
M00057129D:D07	ES 190	440284	1888.N24.gz43_240556
M00057129D:F03	ES 190	451764	1888.O06.gz43_240269
M00057130A:A02	ES 190	736548	1888.O08.gz43_240301
M00057130A:A11	ES 190	288535	1888.O10.gz43_240333
M00057130A:D10	ES 190	736810	1888.O14.gz43_240397
M00057131D:D02	ES 190	726176	1888.P17.gz43_240446
M00057131D:D07	ES 190	735131	1888.P18.gz43_240462

Table 13

CloneID	ES No	ClusterID	SequenceName
M00057132B:H05	ES 190	639644	1897.A02.gz43_240575
M00057132C:C04	ES 190	733951	1897.A04.gz43_240607
M00057133A:B07	ES 190	550227	1897.A15.gz43_240783
M00057133C:B02	ES 190	536225	1897.B05.gz43_240624
M00057134B:D06	ES 190	472068	1897.C03.gz43_240593
M00057135A:B02	ES 190	735989	1897.C23.gz43_240913
M00057135A:H03	ES 190	732544	1897.D01.gz43_240562
M00057135D:D01	ES 190	731476	1897.D12.gz43_240738
M00057136A:F01	ES 190	726810	1897.D18.gz43_240834
M00057136B:F06	ES 190	514142	1897.D21.gz43_240882
M00057137A:C01	ES 190	562008	1897.E02.gz43_240579
M00057137A:H12	ES 190	225960	1897.E06.gz43_240643
M00057137B:C07	ES 190	640662	1897.E12.gz43_240739
M00057138A:F02	ES 190	736288	1897.F05.gz43_240628
M00057138B:B02	ES 190	642273	1897.F09.gz43_240692
M00057138B:H02	ES 190	543772	1897.F12.gz43_240740
M00057138C:D06	ES 190	723853	1897.F15.gz43_240788
M00057138D:F03	ES 190	736318	1897.F18.gz43_240836
M00057138D:F10	ES 190	726440	1897.F19.gz43_240852
M00057139A:B10	ES 190	489001	1897.F23.gz43_240916
M00057139A:G08	ES 190	568031	1897.G02.gz43_240581
M00057139A:G12	ES 190	492691	1897.G04.gz43_240613
M00057139D:G07	ES 190	731317	1897.G19.gz43_240853
M00057140B:H01	ES 190	655327	1897.H08.gz43_240678
M00057140D:B03	ES 190	500758	1897.H15.gz43_240790
M00057140D:F02	ES 190	567005	1897.H17.gz43_240822
M00057141A:D09	ES 190	732965	1897.H20.gz43_240870
M00057141A:G06	ES 190	462779	1897.H23.gz43_240918
M00057142A:H07	ES 190	449035	1897.I18.gz43_240839
M00057142B:F06	ES 190	559004	1897.I22.gz43_240903
M00057144B:B07	ES 190	735087	1897.K12.gz43_240745
M00057144B:D04	ES 190	658271	1897.K13.gz43_240761
M00057144B:F10	ES 190	591449	1897.K16.gz43_240809
M00057144B:H10	ES 190	523171	1897.K17.gz43_240825
M00057144C:A02	ES 190	486076	1897.K18.gz43_240841
M00057144C:G04	ES 190	567122	1897.K23.gz43_240921
M00057144C:G08	ES 190	470684	1897.K24.gz43_240937
M00057144D:D03	ES 190	555960	1897.L02.gz43_240586
M00057145B:B07	ES 190	735131	1897.L12.gz43_240746
M00057145B:E06	ES 190	642570	1897.L14.gz43_240778
M00057145C:H03	ES 190	448202	1897.L22.gz43_240906
M00057145D:E01	ES 190	462779	1897.M02.gz43_240587
M00057146A:H05	ES 190	735801	1897.M12.gz43_240747
M00057146B:C06	ES 190	735283	1897.M13.gz43_240763



Table 13

CloneID	ES No	ClusterID	SequenceName
M00057146B:H12	ES 190	397515	1897.M17.gz43_240827
M00057146D:F05	ES 190	549461	1897.M24.gz43_240939
M00057147A:B07	ES 190	728413	1897.N03.gz43_240604
M00057147A:E11	ES 190	642936	1897.N06.gz43_240652
M00057147A:H07	ES 190	735729	1897.N08.gz43_240684
M00057147C:B01	ES 190	457846	1897.N12.gz43_240748
M00057147C:G01	ES 190	730190	1897.N14.gz43_240780
M00057147D:H09	ES 190	718314	1897.N22.gz43_240908
M00057148B:G07	ES 190	621226	1897.O05.gz43_240637
M00057148C:B02	ES 190	549285	1897.O09.gz43_240701
M00057148C:C09	ES 190	736318	1897.O12.gz43_240749
M00057149A:A04	ES 190	729843	1897.O18.gz43_240845
M00057149B:B07	ES 190	519378	1897.P03.gz43_240606
M00057149B:B08	ES 190	448212	1897.P04.gz43_240622
M00057149C:H01	ES 190	735756	1897.P11.gz43_240734
M00057150D:C04	ES 190	447003	1898.A03.gz43_242227
M00057150D:F08	ES 190	450724	1898.A05.gz43_242259
M00057151A:B04	ES 190	650297	1898.A06.gz43_242275
M00057152B:H02	ES 190	480307	1898.B05.gz43_242260
M00057152C:C10	ES 190	640603	1898.B10.gz43_242340
M00057152C:C12	ES 190	527789	1898.B12.gz43_242372
M00057153B:A04	ES 190	734484	1898.B22.gz43_242532
M00057153B:D02	ES 190	734808	1898.B24.gz43_242564
M00057153B:G07	ES 190	596809	1898.C02.gz43_242213
M00057153D:H01	ES 190	551654	1898.C15.gz43_242421
M00057154C:F04	ES 190	456816	1898.C21.gz43_242517
M00057154D:H07	ES 190	400314	1898.C23.gz43_242549
M00057155A:E11	ES 190	730661	1898.D04.gz43_242246
M00057155A:G11	ES 190	730341	1898.D07.gz43_242294
M00057155A:H07	ES 190	640563	1898.D08.gz43_242310
M00057155C:B07	ES 190	735993	1898.D12.gz43_242374
M00057155C:G04	ES 190	558477	1898.D15.gz43_242422
M00057155C:H07	ES 190	448510	1898.D16.gz43_242438
M00057155D:E12	ES 190	480142	1898.D22.gz43_242534
M00057156B:D10	ES 190	491933	1898.E06.gz43_242279
M00057156C:E08	ES 190	552972	1898.E10.gz43_242343
M00057156D:F02	ES 190	734928	1898.E17.gz43_242455
M00057157D:H08	ES 190	727608	1898.F05.gz43_242264
M00057158B:C02	ES 190	736030	1898.F10.gz43_242344
M00057158C:C10	ES 190	727976	1898.F17.gz43_242456
M00057158C:G05	ES 190	736790	1898.F19.gz43_242488
M00057159C:E11	ES 190	736228	1898.G11.gz43_242361
M00057160A:C02	ES 190	567122	1898.G16.gz43_242441
M00057160A:F11	ES 190	736940	1898.G18.gz43_242473

Table 13

CloneID	ES No	ClusterID	SequenceName
M00057160B:G08	ES 190	454073	1898.G22.gz43_242537
M00057160D:A11	ES 190	461316	1898.H04.gz43_242250
M00057161B:D02	ES 190	402516	1898.H12.gz43_242378
M00057161B:E07	ES 190	735756	1898.H14.gz43_242410
M00057161B:F04	ES 190	448381	1898.H16.gz43_242442
M00057161D:H08	ES 190	730377	1898.I06.gz43_242283
M00057162B:E10	ES 190	728353	1898.I15.gz43_242427
M00057162C:C01	ES 190	735633	1898.I21.gz43_242523
M00057163A:D11	ES 190	483529	1898.J08.gz43_242316
M00057163A:E09	ES 190	607351	1898.J09.gz43_242332
M00057163C:D06	ES 190	736288	1898.J16.gz43_242444
M00057165C:E01	ES 190	736878	1898.L21.gz43_242526
M00057165C:E08	ES 190	599714	1898.L22.gz43_242542
M00057165C:F05	ES 190	723915	1898.L23.gz43_242558
M00057165D:H05	ES 190	648820	1898.M11.gz43_242367
M00057166B:B07	ES 190	736634	1898.M15.gz43_242431
M00057166B:F05	ES 190	448563	1898.M20.gz43_242511
M00057166B:G06	ES 190	737042	1898.M22.gz43_242543
M00057166C:A10	ES 190	449529	1898.N03.gz43_242240
M00057167A:D08	ES 190	726448	1898.N13.gz43_242400
M00057167C:A05	ES 190	732253	1898.N22.gz43_242544
M00057168B:D02	ES 190	583625	1898.O12.gz43_242385
M00057168C:D03	ES 190	737006	1898.O23.gz43_242561
M00057169A:F05	ES 190	649852	1898.P05.gz43_242274
M00057169A:F06	ES 190	733552	1898.P06.gz43_242290
M00057169C:H10	ES 190	737006	1898.P15.gz43_242434
M00057169C:H12	ES 190	734794	1898.P16.gz43_242450
M00057170A:D06	ES 190	733972	1899.A01.gz43_242579
M00057170A:D11	ES 190	471887	1898.P24.gz43_242578
M00057170A:H04	ES 190	730220	1899.A06.gz43_242659
M00057170B:G01	ES 190	734724	1899.A11.gz43_242739
M00057170C:C01	ES 190	725691	1899.A14.gz43_242787
M00057170D:B08	ES 190	480623	1899.A23.gz43_242931
M00057172A:B02	ES 190	723985	1899.B19.gz43_242868
M00057172A:B04	ES 190	549128	1899.B20.gz43_242884
M00057172A:H06	ES 190	639507	1899.B22.gz43_242916
M00057172D:F08	ES 190	473238	1899.C09.gz43_242709
M00057173A:C07	ES 190	528404	1899.C11.gz43_242741
M00057173C:C07	ES 190	535866	1899.C21.gz43_242901
M00057173D:B12	ES 190	562453	1899.D02.gz43_242598
M00057173D:C07	ES 190	729039	1899.D03.gz43_242614
M00057173D:E04	ES 190	422590	1899.D04.gz43_242630
M00057174B:C06	ES 190	734209	1899.D11.gz43_242742
M00057174B:C11	ES 190	561632	1899.D13.gz43_242774

Table 13

CloneID	ES No	ClusterID	SequenceName
M00057174B:F11	ES 190	421794	1899.D15.gz43_242806
M00057174B:G03	ES 190	734744	1899.D16.gz43_242822
M00057174B:G12	ES 190	448770	1899.D17.gz43_242838
M00057174C:G07	ES 190	648221	1899.D21.gz43_242902
M00057175B:G12	ES 190	732625	1899.E08.gz43_242695
M00057175C:D02	ES 190	731370	1899.E13.gz43_242775
M00057175C:F01	ES 190	451812	1899.E16.gz43_242823
M00057175D:A12	ES 190	532904	1899.E17.gz43_242839
M00057175D:E12	ES 190	451383	1899.E22.gz43_242919
M00057176A:A04	ES 190	734692	1899.F01.gz43_242584
M00057176A:C02	ES 190	735235	1899.F03.gz43_242616
M00057176A:H10	ES 190	735764	1899.F07.gz43_242680
M00057176A:H12	ES 190	462986	1899.F08.gz43_242696
M00057176B:B07	ES 190	639779	1899.F11.gz43_242744
M00057176B:F10	ES 190	735605	1899.F16.gz43_242824
M00057176C:H08	ES 190	573733	1899.F19.gz43_242872
M00057176D:A03	ES 190	625988	1899.F20.gz43_242888
M00057177C:D07	ES 190	625988	1899.G12.gz43_242761
M00057177C:G11	ES 190	480142	1899.G13.gz43_242777
M00057177C:H04	ES 190	732429	1899.G15.gz43_242809
M00057177D:G05	ES 190	734726	1899.G22.gz43_242921
M00057179C:B05	ES 190	449548	1899.H05.gz43_242650
M00057179C:G10	ES 190	482512	1899.H08.gz43_242698
M00057179D:B09	ES 190	494423	1899.H09.gz43_242714
M00057180A:H11	ES 190	530883	1899.H15.gz43_242810
M00057180B:C06	ES 190	718314	1899.H18.gz43_242858
M00057180B:D01	ES 190	475872	1899.H19.gz43_242874
M00057180B:F05	ES 190	736280	1899.H21.gz43_242906
M00057180B:G06	ES 190	674526	1899.H23.gz43_242938
M00057180B:H05	ES 190	550588	1899.H24.gz43_242954
M00057180C:F09	ES 190	736309	1899.I06.gz43_242667
M00057180D:C10	ES 191	735789	1899.I09.gz43_242715
M00057180D:G06	ES 191	488447	1899.I11.gz43_242747
M00057181C:D10	ES 191	554221	1899.J01.gz43_242588
M00057181C:G07	ES 191	560183	1899.J03.gz43_242620
M00057181D:C09	ES 191	735801	1899.J07.gz43_242684
M00057181D:H07	ES 191	452243	1899.J11.gz43_242748
M00057182A:H07	ES 191	737116	1899.J18.gz43_242860
M00057182B:D09	ES 191	736773	1899.J22.gz43_242924
M00057182C:C03	ES 191	642936	1899.K04.gz43_242637
M00057182C:C11	ES 191	373615	1899.K06.gz43_242669
M00057182D:A08	ES 191	477098	1899.K07.gz43_242685
M00057182D:B11	ES 191	736595	1899.K09.gz43_242717

Table 13

CloneID	ES No	ClusterID	SequenceName
M00057186A:B03	ES 191	732244	1899.K14.gz43_242797
M00057186A:E12	ES 191	560568	1899.K17.gz43_242845
M00057186B:E07	ES 191	636748	1899.K22.gz43_242925
M00057189A:A08	ES 191	735871	1899.L05.gz43_242654
M00057189C:G11	ES 191	736354	1899.L20.gz43_242894
M00057189D:B08	ES 191	733623	1899.L22.gz43_242926
M00057189D:G08	ES 191	554683	1899.M02.gz43_242607
M00057191A:H09	ES 191	734031	1899.M07.gz43_242687
M00057191B:C06	ES 191	735514	1899.M09.gz43_242719
M00057191C:D02	ES 191	727523	1899.M14.gz43_242799
M00057191D:B08	ES 191	463402	1899.M17.gz43_242847
M00057191D:G10	ES 191	734928	1899.M22.gz43_242927
M00057192A:B04	ES 191	730805	1899.M23.gz43_242943
M00057192A:D05	ES 191	724061	1899.M24.gz43_242959
M00057192A:D12	ES 191	735426	1899.N01.gz43_242592
M00057192A:F01	ES 191	474346	1899.N02.gz43_242608
M00057192A:H05	ES 191	730106	1899.N04.gz43_242640
M00057192B:D10	ES 191	419711	1899.N07.gz43_242688
M00057192C:B11	ES 191	730899	1899.N10.gz43_242736
M00057192D:C10	ES 191	734724	1899.N13.gz43_242784
M00057192D:G02	ES 191	726786	1899.N16.gz43_242832
M00057192D:G04	ES 191	736402	1899.N17.gz43_242848
M00057193B:C11	ES 191	156329	1899.N21.gz43_242912
M00057193C:F11	ES 191	640635	1899.O06.gz43_242673
M00057193D:F06	ES 191	630516	1899.O09.gz43_242721
M00057194A:B07	ES 191	734061	1899.O11.gz43_242753
M00057194A:C06	ES 191	736049	1899.O13.gz43_242785
M00057194A:F01	ES 191	725089	1899.O16.gz43_242833
M00057194A:H01	ES 191	724061	1899.O18.gz43_242865
M00057194B:E05	ES 191	721768	1899.O21.gz43_242913
M00057194B:H08	ES 191	728061	1899.O24.gz43_242961
M00057194C:A03	ES 191	454812	1899.P01.gz43_242594
M00057194C:F02	ES 191	736861	1899.P05.gz43_242658
M00057194C:F10	ES 191	390968	1899.P07.gz43_242690
M00057194D:C12	ES 191	552055	1899.P10.gz43_242738
M00057196A:E03	ES 191	729173	1899.P15.gz43_242818
M00057196B:H10	ES 191	516729	1899.P17.gz43_242850
M00057197D:H10	ES 191	735797	1900.A14.gz43_243171
M00057198B:C02	ES 191	161489	1900.A20.gz43_243267
M00057199B:B06	ES 191	516729	1900.B08.gz43_243076
M00057199C:H08	ES 191	483061	1900.B12.gz43_243140
M00057200B:D04	ES 191	532904	1900.B22.gz43_243300
M00057200D:E03	ES 191	730308	1900.C04.gz43_243013
M00057201A:H03	ES 191	725905	1900.C12.gz43_243141

Table 13

CloneID	ES No	ClusterID	SequenceName
M00057201B:H10	ES 191	494423	1900.C20.gz43_243269
M00057202A:D05	ES 191	446752	1900.D06.gz43_243046
M00057203B:F08	ES 191	552457	1900.E02.gz43_242983
M00057203C:A09	ES 191	734993	1900.E04.gz43_243015
M00057203D:A09	ES 191	689424	1900.E08.gz43_243079
M00057204A:F11	ES 191	736276	1900.E15.gz43_243191
M00057204C:G06	ES 191	561626	1900.E24.gz43_243335
M00057205D:G06	ES 191	734226	1900.F20.gz43_243272
M00057206A:C06	ES 191	640350	1900.G01.gz43_242969
M00057207A:A07	ES 191	736500	1900.G20.gz43_243273
M00057207B:F06	ES 191	562320	1900.H04.gz43_243018
M00057208B:H08	ES 191	731531	1900.I08.gz43_243083
M00057208C:E12	ES 191	732771	1900.I14.gz43_243179
M00057210A:C12	ES 191	726449	1900.K01.gz43_242973
M00057210C:D09	ES 191	736778	1900.K08.gz43_243085
M00057210C:G07	ES 191	730109	1900.K12.gz43_243149
M00057211A:D01	ES 191	733272	1900.K20.gz43_243277
M00057211B:A08	ES 191	648379	1900.K22.gz43_243309
M00057211B:C09	ES 191	653616	1900.K24.gz43_243341
M00057211B:G01	ES 191	559754	1900.L04.gz43_243022
M00057211C:C06	ES 191	736738	1900.L06.gz43_243054
M00057211C:F05	ES 191	451176	1900.L09.gz43_243102
M00057212B:D05	ES 191	450284	1900.L23.gz43_243326
M00057213C:D06	ES 191	648757	1900.M12.gz43_243151
M00057214A:B05	ES 191	736497	1900.M19.gz43_243263
M00057214B:B12	ES 191	649490	1900.M22.gz43_243311
M00057216C:D12	ES 191	194769	1900.N22.gz43_243312
M00057216D:D05	ES 191	556656	1900.O04.gz43_243025
M00057216D:E12	ES 191	642985	1900.O06.gz43_243057
M00057216D:F10	ES 191	639395	1900.O07.gz43_243073
M00057217A:A12	ES 191	724638	1900.O10.gz43_243121
M00057217B:F12	ES 191	449078	1900.O19.gz43_243265
M00057217D:A06	ES 191	712120	1900.P10.gz43_243122
M00057218C:F10	ES 191	454129	1909.A04.gz43_243395
M00057219A:D05	ES 191	726251	1909.A09.gz43_243475
M00057219A:D07	ES 191	733151	1909.A10.gz43_243491
M00057219A:E11	ES 191	733309	1909.A12.gz43_243523
M00057219A:H11	ES 191	736988	1909.A13.gz43_243539
M00057219B:B10	ES 191	591979	1909.A14.gz43_243555
M00057219B:C06	ES 191	474869	1909.A15.gz43_243571
M00057219D:C02	ES 191	737010	1909.A23.gz43_243699
M00057219D:G11	ES 191	380310	1909.B03.gz43_243380
M00057219D:H04	ES 191	733868	1909.B04.gz43_243396
M00057220A:C06	ES 191	472811	1909.B08.gz43_243460

Table 13

CloneID	ES No	ClusterID	SequenceName
M00057220A:D09	ES 191	642631	1909.B09.gz43_243476
M00057220B:A06	ES 191	613067	1909.B13.gz43_243540
M00057220B:G01	ES 191	476866	1909.B17.gz43_243604
M00057220B:G10	ES 191	735622	1909.B18.gz43_243620
M00057220C:A08	ES 191	556852	1909.B20.gz43_243652
M00057220C:F08	ES 191	735514	1909.B23.gz43_243700
M00057220D:E06	ES 191	465697	1909.C03.gz43_243381
M00057220D:F02	ES 191	735510	1909.C04.gz43_243397
M00057220D:F06	ES 191	736076	1909.C05.gz43_243413
M00057221A:E10	ES 191	453587	1909.C10.gz43_243493
M00057221B:B01	ES 191	631111	1909.C12.gz43_243525
M00057221B:E11	ES 191	735306	1909.C15.gz43_243573
M00057221C:E07	ES 191	553850	1909.C22.gz43_243685
M00057221C:F02	ES 191	418682	1909.C23.gz43_243701
M00057222B:A06	ES 191	398061	1909.D05.gz43_243414
M00057222D:C10	ES 191	735514	1909.D11.gz43_243510
M00057223A:F06	ES 191	732899	1909.D17.gz43_243606
M00057223B:A07	ES 191	734609	1909.D21.gz43_243670
M00057223B:B04	ES 191	736894	1909.D22.gz43_243686
M00057223B:G01	ES 191	726892	1909.E03.gz43_243383
M00057223C:A01	ES 191	549578	1909.E05.gz43_243415
M00057223C:B01	ES 191	727255	1909.E06.gz43_243431
M00057223D:H03	ES 191	736738	1909.E13.gz43_243543
M00057224A:D07	ES 191	454355	1909.E16.gz43_243591
M00057224B:H02	ES 191	727558	1909.E24.gz43_243719
M00057224C:B02	ES 191	475562	1909.F02.gz43_243368
M00057225A:C08	ES 191	550121	1909.F10.gz43_243496
M00057225A:E03	ES 191	602673	1909.F11.gz43_243512
M00057225C:F09	ES 191	734562	1909.F23.gz43_243704
M00057225C:H07	ES 191	734828	1909.G01.gz43_243353
M00057225D:E01	ES 191	734690	1909.G05.gz43_243417
M00057226A:B04	ES 191	646552	1909.G13.gz43_243545
M00057226A:E09	ES 191	374125	1909.G16.gz43_243593
M00057226C:A09	ES 191	734915	1909.G23.gz43_243705
M00057226C:E05	ES 191	427113	1909.H01.gz43_243354
M00057226C:F05	ES 191	175524	1909.H02.gz43_243370
M00057226C:F12	ES 191	642940	1909.H04.gz43_243402
M00057226C:H10	ES 191	648140	1909.H08.gz43_243466
M00057226D:B03	ES 191	735050	1909.H10.gz43_243498
M00057226D:C10	ES 191	735172	1909.H11.gz43_243514
M00057227B:A05	ES 191	732159	1909.H20.gz43_243658
M00057227B:D12	ES 191	560399	1909.H23.gz43_243706
M00057227B:H04	ES 191	607202	1909.H24.gz43_243722
M00057229A:B03	ES 191	632499	1909.I06.gz43_243435

Table 13

CloneID	ES No	ClusterID	SequenceName
M00057229B:F11	ES 191	647815	1909.I11.gz43_243515
M00057229B:G11	ES 191	650599	1909.I12.gz43_243531
M00057230B:B07	ES 191	616985	1909.I21.gz43_243675
M00057230B:F10	ES 191	641510	1909.I24.gz43_243723
M00057230C:C05	ES 191	723959	1909.J03.gz43_243388
M00057230C:G12	ES 191	598087	1909.J09.gz43_243484
M00057230D:C05	ES 191	456224	1909.J12.gz43_243532
M00057231A:D04	ES 191	733149	1909.J17.gz43_243612
M00057231A:G04	ES 191	405546	1909.J22.gz43_243692
M00057231B:A01	ES 191	561877	1909.K01.gz43_243357
M00057231C:B04	ES 191	735749	1909.K02.gz43_243373
M00057231C:E06	ES 191	737010	1909.K06.gz43_243437
M00057231C:F12	ES 191	398061	1909.K09.gz43_243485
M00057231C:G04	ES 191	735140	1909.K10.gz43_243501
M00057231D:A04	ES 191	639565	1909.K14.gz43_243565
M00057231D:A05	ES 191	732736	1909.K15.gz43_243581
M00057231D:F10	ES 191	486051	1909.K22.gz43_243693
M00057232B:G02	ES 191	728121	1909.L06.gz43_243438
M00057232D:B03	ES 191	555336	1909.L12.gz43_243534
M00057232D:B05	ES 191	735131	1909.L13.gz43_243550
M00057233A:C04	ES 191	724417	1909.L15.gz43_243582
M00057233B:G04	ES 191	454563	1909.M01.gz43_243359
M00057233D:G12	ES 191	463513	1909.M09.gz43_243487
M00057234B:F06	ES 191	727532	1909.M18.gz43_243631
M00057234C:D11	ES 191	664711	1909.M23.gz43_243711
M00057234D:A12	ES 191	733874	1909.N03.gz43_243392
M00057234D:C09	ES 191	726760	1909.N04.gz43_243408
M00057234D:E04	ES 191	601051	1909.N05.gz43_243424
M00057235B:A07	ES 191	731467	1909.N14.gz43_243568
M00057235C:C08	ES 191	734151	1909.N21.gz43_243680
M00057235C:F03	ES 191	734553	1909.N22.gz43_243696
M00057235D:A05	ES 191	733160	1909.O01.gz43_243361
M00057235D:C03	ES 191	417822	1909.O03.gz43_243393
M00057236A:F08	ES 191	450340	1909.O10.gz43_243505
M00057236B:D11	ES 191	725120	1909.O13.gz43_243553
M00057236C:C07	ES 191	453132	1909.O19.gz43_243649
M00057236D:H09	ES 191	625810	1909.P01.gz43_243362
M00057237B:D10	ES 191	735817	1909.P10.gz43_243506
M00057237D:C11	ES 191	724781	1909.P19.gz43_243650
M00057237D:D09	ES 191	473578	1909.P22.gz43_243698
M00057238A:D07	ES 191	641680	1910.A03.gz43_243763
M00057238B:F05	ES 191	551437	1910.A09.gz43_243859
M00057239B:F05	ES 191	647704	1910.B07.gz43_243828
M00057239C:E05	ES 191	734466	1910.B10.gz43_243876

Table 13

CloneID	ES No	ClusterID	SequenceName
M00057239C:G07	ES 191	729125	1910.B13.gz43_243924
M00057239D:D01	ES 191	456753	1910.B16.gz43_243972
M00057240A:F03	ES 191	730028	1910.C01.gz43_243733
M00057240B:C01	ES 191	730046	1910.C06.gz43_243813
M00042351A:H03	ES 192	499660	1923.A02.gz43_252631
M00042351C:G01	ES 192	498777	1923.A05.gz43_252679
M00042351C:G11	ES 192	452094	1923.A06.gz43_252695
M00042351D:D02	ES 192	496446	1923.A09.gz43_252743
M00042351D:F08	ES 192	451429	1923.A10.gz43_252759
M00057240C:A06	ES 192	733855	1910.C13.gz43_243925
M00057241B:B04	ES 192	734094	1910.D01.gz43_243734
M00057241D:C04	ES 192	734226	1910.D08.gz43_243846
M00057241D:G01	ES 192	733945	1910.D14.gz43_243942
M00057242A:H11	ES 192	734808	1910.D19.gz43_244022
M00057242B:F07	ES 192	735477	1910.D21.gz43_244054
M00057242C:G12	ES 192	611604	1910.E01.gz43_243735
M00057242D:C07	ES 192	650067	1910.E06.gz43_243815
M00057242D:F10	ES 192	453454	1910.E09.gz43_243863
M00057243A:H03	ES 192	457846	1910.E15.gz43_243959
M00057243C:D01	ES 192	733552	1910.F02.gz43_243752
M00057243C:H11	ES 192	734884	1910.F06.gz43_243816
M00057244C:D08	ES 192	481273	1910.F22.gz43_244072
M00057244C:E06	ES 192	455821	1910.F24.gz43_244104
M00057245A:F03	ES 192	555641	1910.G07.gz43_243833
M00057245B:A08	ES 192	43349	1910.G10.gz43_243881
M00057245B:E02	ES 192	484964	1910.G12.gz43_243913
M00057245D:G02	ES 192	476455	1910.G20.gz43_244041
M00057246A:G11	ES 192	558617	1910.H01.gz43_243738
M00057246C:B12	ES 192	733991	1910.H12.gz43_243914
M00057246D:G09	ES 192	563313	1910.H18.gz43_244010
M00057247C:B11	ES 192	734849	1910.I03.gz43_243771
M00057247C:C11	ES 192	732859	1910.I04.gz43_243787
M00057247C:F10	ES 192	550730	1910.I06.gz43_243819
M00057247D:D10	ES 192	734371	1910.I10.gz43_243883
M00057248A:H10	ES 192	734894	1910.I21.gz43_244059
M00057248B:D11	ES 192	733144	1910.J01.gz43_243740
M00057248C:B08	ES 192	733989	1910.J06.gz43_243820
M00057249A:B05	ES 192	733055	1910.J12.gz43_243916
M00057249A:C06	ES 192	555103	1910.J14.gz43_243948
M00057249C:C07	ES 192	473588	1910.J21.gz43_244060
M00057249D:G03	ES 192	639779	1910.K05.gz43_243805
M00057249D:H09	ES 192	449042	1910.K06.gz43_243821
M00057250B:A03	ES 192	731392	1910.K11.gz43_243901



Table 13

CloneID	ES No	ClusterID	SequenceName
M00057250B:D04	ES 192	726011	1910.K14.gz43_243949
M00057250C:G02	ES 192	735665	1910.K21.gz43_244061
M00057251A:F02	ES 192	514838	1910.L03.gz43_243774
M00057252A:D10	ES 192	731125	1910.L19.gz43_244030
M00057252B:E04	ES 192	647242	1910.M01.gz43_243743
M00057252C:D08	ES 192	732978	1910.M08.gz43_243855
M00057252D:B10	ES 192	639494	1910.M09.gz43_243871
M00057252D:D04	ES 192	585976	1910.M12.gz43_243919
M00057253A:C05	ES 192	731238	1910.M17.gz43_243999
M00057253A:H10	ES 192	735754	1910.M20.gz43_244047
M00057253B:C06	ES 192	725095	1910.M22.gz43_244079
M00057253C:A06	ES 192	729428	1910.N02.gz43_243760
M00057253C:D11	ES 192	735403	1910.N03.gz43_243776
M00057254A:E12	ES 192	477555	1910.N12.gz43_243920
M00057254A:G07	ES 192	557353	1910.N14.gz43_243952
M00057254B:D04	ES 192	552598	1910.N18.gz43_244016
M00057255C:A07	ES 192	558332	1910.O17.gz43_244001
M00057255C:C10	ES 192	732962	1910.O18.gz43_244017
M00057255D:E02	ES 192	449537	1910.O24.gz43_244113
M00057256B:A05	ES 192	661194	1910.P09.gz43_243874
M00057256D:A11	ES 192	649390	1910.P17.gz43_244002
M00057257A:H10	ES 192	726081	1910.P23.gz43_244098
M00057257B:C11	ES 192	514697	1910.P24.gz43_244114
M00057258C:C09	ES 192	731516	1911.A24.gz43_244483
M00057259D:D11	ES 192	420504	1911.B23.gz43_244468
M00057260A:E05	ES 192	630348	1911.C02.gz43_244133
M00057260A:E11	ES 192	728756	1911.C03.gz43_244149
M00057260C:A04	ES 192	734928	1911.C12.gz43_244293
M00057262B:C03	ES 192	482145	1911.D07.gz43_244214
M00057265C:F03	ES 192	725951	1911.D24.gz43_244486
M00057265D:B12	ES 192	735071	1911.E04.gz43_244167
M00057266C:G12	ES 192	554703	1911.E24.gz43_244487
M00057266D:B12	ES 192	733570	1911.F02.gz43_244136
M00057267A:H04	ES 192	731457	1911.F10.gz43_244264
M00057267C:B12	ES 192	650552	1911.F17.gz43_244376
M00057267C:G09	ES 192	735687	1911.F23.gz43_244472
M00057268A:H05	ES 192	640158	1911.G17.gz43_244377
M00057268B:B03	ES 192	652782	1911.G18.gz43_244393
M00057268D:E04	ES 192	446247	1911.H05.gz43_244186
M00057269C:E01	ES 192	725784	1911.H18.gz43_244394
M00057269C:H06	ES 192	732213	1911.H22.gz43_244458
M00057269D:F02	ES 192	586794	1911.I01.gz43_244123
M00057271A:E04	ES 192	480723	1911.J02.gz43_244140
M00057271B:D09	ES 192	450199	1911.J06.gz43_244204

Table 13

CloneID	ES No	ClusterID	SequenceName
M00057272C:D08	ES 192	728790	1911.J23.gz43_244476
M00057273A:C08	ES 192	630655	1911.K04.gz43_244173
M00057273B:A12	ES 192	735834	1911.K10.gz43_244269
M00057273C:F07	ES 192	736294	1911.K14.gz43_244333
M00057273C:F11	ES 192	482985	1911.K15.gz43_244349
M00057273D:A06	ES 192	729321	1911.K19.gz43_244413
M00057273D:B06	ES 192	474691	1911.K20.gz43_244429
M00057274B:C05	ES 192	735249	1911.L06.gz43_244206
M00057274C:G01	ES 192	735676	1911.L13.gz43_244318
M00057275A:G02	ES 192	456011	1911.L21.gz43_244446
M00057275B:A12	ES 192	546642	1911.L24.gz43_244494
M00057275B:B02	ES 192	648710	1911.M01.gz43_244127
M00057277B:C09	ES 192	736014	1911.M11.gz43_244287
M00057277B:E10	ES 192	642142	1911.M12.gz43_244303
M00057279A:G02	ES 192	736014	1911.N04.gz43_244176
M00057280C:B08	ES 192	734849	1911.O01.gz43_244129
M00057281A:D08	ES 192	450692	1911.O11.gz43_244289
M00057281A:H02	ES 192	456065	1911.O12.gz43_244305
M00057283A:E06	ES 192	736860	1911.P04.gz43_244178
M00057283B:D09	ES 192	736860	1911.P10.gz43_244274
M00057283D:B12	ES 192	734131	1911.P23.gz43_244482
M00057283D:D04	ES 192	552249	1911.P24.gz43_244498
M00057287A:H06	ES 192	730187	1912.B21.gz43_244820
M00057287C:B12	ES 192	734546	1912.C01.gz43_244501
M00057290B:A02	ES 192	728768	1912.D08.gz43_244614
M00057290D:G03	ES 192	558045	1912.D16.gz43_244742
M00057291B:D08	ES 192	732300	1912.D24.gz43_244870
M00057291B:H08	ES 192	730189	1912.E03.gz43_244535
M00057292A:B08	ES 192	639427	1912.E19.gz43_244791
M00057292C:C09	ES 192	731910	1912.F03.gz43_244536
M00057293A:H03	ES 192	737109	1912.F12.gz43_244680
M00057293B:H04	ES 192	733856	1912.F16.gz43_244744
M00057299C:A08	ES 192	420402	1912.H10.gz43_244650
M00057299D:E04	ES 192	424672	1912.H15.gz43_244730
M00057300A:A08	ES 192	736449	1912.H17.gz43_244762
M00057300A:B06	ES 192	148201	1912.H18.gz43_244778
M00057301A:A08	ES 192	726430	1912.I11.gz43_244667
M00057302C:D04	ES 192	726874	1912.J18.gz43_244780
M00057305B:B10	ES 192	648738	1912.L05.gz43_244574
M00057309B:E10	ES 192	481930	1912.N06.gz43_244592
M00057314A:A10	ES 192	465528	1921.A01.gz43_244883
M00057314B:H06	ES 192	737114	1921.A07.gz43_244979
M00057314D:E09	ES 192	726692	1921.A16.gz43_245123
M00057314D:F04	ES 192	734894	1921.A17.gz43_245139

Table 13

CloneID	ES No	ClusterID	SequenceName
M00057315D:C06	ES 192	736733	1921.B06.gz43_244964
M00057316A:A08	ES 192	736551	1921.B10.gz43_245028
M00057316A:B04	ES 192	552623	1921.B11.gz43_245044
M00057316A:D09	ES 192	727093	1921.B12.gz43_245060
M00057316C:A06	ES 192	457092	1921.B20.gz43_245188
M00057316D:D02	ES 192	640341	1921.C04.gz43_244933
M00057316D:G04	ES 192	734412	1921.C06.gz43_244965
M00057318A:B02	ES 192	550085	1921.C08.gz43_244997
M00057318B:H05	ES 192	730997	1921.C17.gz43_245141
M00057318C:C12	ES 192	480377	1921.C20.gz43_245189
M00057318C:G04	ES 192	655312	1921.C22.gz43_245221
M00057319D:E06	ES 192	556430	1921.D15.gz43_245110
M00057320A:C03	ES 192	641312	1921.D21.gz43_245206
M00057320A:G08	ES 192	470199	1921.E02.gz43_244903
M00057320B:H03	ES 192	710362	1921.E05.gz43_244951
M00057320D:C02	ES 192	447705	1921.E11.gz43_245047
M00057323A:F01	ES 192	51616	1921.E18.gz43_245159
M00057323B:G04	ES 192	729125	1921.F03.gz43_244920
M00057323B:H08	ES 192	77737	1921.F04.gz43_244936
M00057323D:E10	ES 192	473225	1921.F16.gz43_245128
M00057324A:A09	ES 192	567078	1921.F18.gz43_245160
M00057324A:C08	ES 192	727231	1921.F19.gz43_245176
M00057324B:A06	ES 192	513306	1921.F23.gz43_245240
M00057324B:E04	ES 192	735469	1921.G04.gz43_244937
M00057324C:G05	ES 192	731748	1921.G11.gz43_245049
M00057324D:E10	ES 192	727013	1921.G13.gz43_245081
M00057324D:H03	ES 192	548635	1921.G14.gz43_245097
M00057325B:B09	ES 192	557693	1921.G17.gz43_245145
M00057325B:D06	ES 192	643005	1921.G18.gz43_245161
M00057325B:H04	ES 192	557451	1921.G24.gz43_245257
M00057325C:F03	ES 192	484974	1921.H03.gz43_244922
M00057326A:E11	ES 192	734522	1921.H10.gz43_245034
M00057326D:B10	ES 192	735054	1921.H18.gz43_245162
M00057328A:F02	ES 192	733723	1921.H21.gz43_245210
M00057328A:F10	ES 192	697006	1921.H22.gz43_245226
M00057328C:F11	ES 192	732969	1921.I06.gz43_244971
M00057328D:G02	ES 192	556490	1921.I10.gz43_245035
M00057331C:E10	ES 192	557177	1921.I21.gz43_245211
M00057331C:F10	ES 192	452936	1921.I22.gz43_245227
M00057331D:D08	ES 192	549552	1921.J01.gz43_244892
M00057332A:C06	ES 192	635849	1921.J06.gz43_244972
M00057332C:F12	ES 192	726692	1921.J14.gz43_245100
M00057333A:D08	ES 192	733464	1921.J19.gz43_245180
M00057333B:F03	ES 192	541793	1921.J24.gz43_245260

Table 13

CloneID	ES No	ClusterID	SequenceName
M00057334A:C12	ES 192	726406	1921.K16.gz43_245133
M00057334B:F01	ES 192	734582	1921.K21.gz43_245213
M00057334D:A12	ES 192	735425	1921.L04.gz43_244942
M00057334D:E03	ES 192	732114	1921.L07.gz43_244990
M00057336B:E01	ES 192	727018	1921.L13.gz43_245086
M00057336D:F07	ES 192	448431	1921.L21.gz43_245214
M00057337A:A06	ES 192	727132	1921.L22.gz43_245230
M00057337A:A11	ES 192	482722	1921.L23.gz43_245246
M00057337C:G12	ES 192	554647	1921.M10.gz43_245039
M00057337C:H07	ES 192	496909	1921.M13.gz43_245087
M00057337D:F06	ES 192	614455	1921.M16.gz43_245135
M00057338B:D08	ES 192	643909	1921.M24.gz43_245263
M00057338C:H01	ES 192	466697	1921.N05.gz43_244960
M00057339A:E08	ES 192	551607	1921.N12.gz43_245072
M00057339B:C04	ES 192	477688	1921.N17.gz43_245152
M00057339D:C01	ES 192	448250	1921.O04.gz43_244945
M00057339D:H09	ES 192	733146	1921.O06.gz43_244977
M00057341D:B09	ES 192	482788	1921.P08.gz43_245010
M00057343D:B10	ES 192	481273	1921.P17.gz43_245154
M00057344A:G07	ES 192	642986	1921.P24.gz43_245266
M00042351D:H05	ES 193	451429	1923.A11.gz43_252775
M00042352A:G05	ES 193	451518	1923.A14.gz43_252823
M00042352A:G09	ES 193	456672	1923.A15.gz43_252839
M00042352B:F03	ES 193	498194	1923.A19.gz43_252903
M00042352B:F10	ES 193	451430	1923.A20.gz43_252919
M00042352C:G01	ES 193	451302	1923.A23.gz43_252967
M00042352D:A11	ES 193	450902	1923.A24.gz43_252983
M00042352D:F11	ES 193	498504	1923.B01.gz43_252616
M00042353B:A11	ES 193	493575	1923.B05.gz43_252680
M00042353B:B02	ES 193	494378	1923.B06.gz43_252696
M00042353D:B08	ES 193	494393	1923.B13.gz43_252808
M00042353D:C06	ES 193	451043	1923.B14.gz43_252824
M00042354B:A07	ES 193	450823	1923.B17.gz43_252872
M00042354C:F04	ES 193	451126	1923.B19.gz43_252904
M00042355A:A12	ES 193	494133	1923.B22.gz43_252952
M00042355A:C03	ES 193	451126	1923.B23.gz43_252968
M00042355A:H09	ES 193	424723	1923.C01.gz43_252617
M00042355B:A05	ES 193	450875	1923.C02.gz43_252633
M00042355B:B07	ES 193	451009	1923.C03.gz43_252649
M00042355B:E10	ES 193	497400	1923.C04.gz43_252665
M00042355C:F02	ES 193	451383	1923.C05.gz43_252681
M00042355C:G09	ES 193	451470	1923.C07.gz43_252713
M00042442A:A12	ES 193	494130	1923.C23.gz43_252969

Table 13

CloneID	ES No	ClusterID	SequenceName
M00042442A:G04	ES 193	499178	1923.C24.gz43_252985
M00042442B:A07	ES 193	448936	1923.D02.gz43_252634
M00042443B:D03	ES 193	451176	1923.D11.gz43_252778
M00042443D:E01	ES 193	497101	1923.D15.gz43_252842
M00042444A:C10	ES 193	446263	1923.D17.gz43_252874
M00042444A:D04	ES 193	451212	1923.D18.gz43_252890
M00042444A:H06	ES 193	499779	1923.D19.gz43_252906
M00042444C:E02	ES 193	451124	1923.E01.gz43_252619
M00042445A:B04	ES 193	487745	1923.E06.gz43_252699
M00042445C:A08	ES 193	451544	1923.E10.gz43_252763
M00042446B:G02	ES 193	450507	1923.E19.gz43_252907
M00042446D:F04	ES 193	450507	1923.E24.gz43_252987
M00042447C:H10	ES 193	448663	1923.F06.gz43_252700
M00042447D:E04	ES 193	450302	1923.F08.gz43_252732
M00042447D:G10	ES 193	492110	1923.F09.gz43_252748
M00042448B:B02	ES 193	450926	1923.F12.gz43_252796
M00042448B:C04	ES 193	451049	1923.F13.gz43_252812
M00042448C:B07	ES 193	494423	1923.F18.gz43_252892
M00042448C:C09	ES 193	451054	1923.F20.gz43_252924
M00042449A:H10	ES 193	448556	1923.F24.gz43_252988
M00042449C:D10	ES 193	450219	1923.G02.gz43_252637
M00042449D:C06	ES 193	452094	1923.G04.gz43_252669
M00042449D:H11	ES 193	450765	1923.G06.gz43_252701
M00042450A:B01	ES 193	450912	1923.G07.gz43_252717
M00042450A:D02	ES 193	495941	1923.G09.gz43_252749
M00042450C:B09	ES 193	494362	1923.G18.gz43_252893
M00042451D:H10	ES 193	451618	1923.H04.gz43_252670
M00042452C:A09	ES 193	486912	1923.H10.gz43_252766
M00042452C:C10	ES 193	449974	1923.H11.gz43_252782
M00042452D:C04	ES 193	488680	1923.H15.gz43_252846
M00042452D:G06	ES 193	492094	1923.H17.gz43_252878
M00042453A:D12	ES 193	450166	1923.H20.gz43_252926
M00042453C:D12	ES 193	451518	1923.I03.gz43_252655
M00042454A:F02	ES 193	450400	1923.I12.gz43_252799
M00042454D:H10	ES 193	450723	1923.I19.gz43_252911
M00042455A:C06	ES 193	488859	1923.I20.gz43_252927
M00042455A:G12	ES 193	492304	1923.I22.gz43_252959
M00042455B:D05	ES 193	454575	1923.I24.gz43_252991
M00042455B:G09	ES 193	492292	1923.J02.gz43_252640
M00042455C:D11	ES 193	450255	1923.J03.gz43_252656
M00042455C:E04	ES 193	490890	1923.J04.gz43_252672
M00042455D:H08	ES 193	446621	1923.J09.gz43_252752
M00042456A:C08	ES 193	456492	1923.J10.gz43_252768
M00042456A:F08	ES 193	450425	1923.J12.gz43_252800

Table 13

CloneID	ES No	ClusterID	SequenceName
M00042456C:H07	ES 193	492981	1923.J19.gz43_252912
M00042456D:B06	ES 193	453667	1923.J20.gz43_252928
M00042456D:D07	ES 193	100821	1923.J22.gz43_252960
M00042457D:D02	ES 193	489426	1923.K07.gz43_252721
M00042458B:B08	ES 193	59512	1923.K11.gz43_252785
M00042458B:G05	ES 193	558729	1923.K13.gz43_252817
M00042458C:C07	ES 193	562353	1923.K14.gz43_252833
M00042458C:D08	ES 193	395968	1923.K16.gz43_252865
M00042458C:E06	ES 193	552581	1923.K17.gz43_252881
M00042458D:E06	ES 193	562588	1923.K20.gz43_252929
M00042459A:E04	ES 193	562587	1923.K23.gz43_252977
M00042459B:F03	ES 193	556916	1923.L05.gz43_252690
M00042459B:F12	ES 193	468729	1923.L06.gz43_252706
M00042459C:B11	ES 193	562274	1923.L09.gz43_252754
M00042459C:E06	ES 193	562627	1923.L12.gz43_252802
M00042459C:G02	ES 193	526733	1923.L13.gz43_252818
M00042459D:B07	ES 193	552236	1923.L15.gz43_252850
M00042459D:E03	ES 193	560420	1923.L18.gz43_252898
M00042459D:G04	ES 193	527679	1923.L20.gz43_252930
M00042460B:C06	ES 193	374282	1923.L24.gz43_252994
M00042460B:D10	ES 193	556804	1923.M03.gz43_252659
M00042460B:G12	ES 193	559575	1923.M08.gz43_252739
M00042460C:A02	ES 193	550362	1923.M11.gz43_252787
M00042460C:B02	ES 193	452232	1923.M14.gz43_252835
M00042460C:G08	ES 193	562603	1923.M22.gz43_252963
M00042460C:H10	ES 193	562543	1923.M23.gz43_252979
M00042460D:H06	ES 193	551755	1923.N05.gz43_252692
M00042516A:A06	ES 193	455439	1923.N08.gz43_252740
M00042516A:A10	ES 193	562115	1923.N09.gz43_252756
M00042516A:C08	ES 193	562060	1923.N10.gz43_252772
M00042516B:E03	ES 193	558559	1923.N13.gz43_252820
M00042516C:C04	ES 193	562399	1923.N18.gz43_252900
M00042516D:B11	ES 193	562275	1923.N22.gz43_252964
M00042516D:C01	ES 193	562398	1923.N23.gz43_252980
M00042516D:H08	ES 193	553312	1923.O01.gz43_252629
M00042516D:H09	ES 193	638444	1923.O02.gz43_252645
M00042517C:B04	ES 193	495074	1923.O05.gz43_252693
M00042517D:A12	ES 193	494300	1923.O09.gz43_252757
M00042517D:G04	ES 193	211273	1923.O11.gz43_252789
M00042518D:A08	ES 193	487522	1923.O18.gz43_252901
M00042519D:F09	ES 193	456024	1923.P02.gz43_252646
M00042519D:H07	ES 193	492982	1923.P04.gz43_252678
M00042520A:F09	ES 193	452833	1923.P10.gz43_252774
M00042520C:E12	ES 193	449104	1923.P16.gz43_252870

Table 13

CloneID	ES No	ClusterID	SequenceName
M00043296A:E08	ES 193	497517	1923.P23.gz43_252982
M00043301D:B12	ES 193	450999	1924.C17.gz43_245558
M00043303B:E11	ES 193	450349	1924.D15.gz43_245527
M00043304B:A10	ES 193	450805	1924.E04.gz43_245352
M00043304C:E01	ES 193	496957	1924.E09.gz43_245432
M00043305A:H06	ES 193	204862	1924.E13.gz43_245496
M00043306B:A09	ES 193	493746	1924.E24.gz43_245672
M00043307B:F11	ES 193	498242	1924.F18.gz43_245577
M00043308A:D09	ES 193	496752	1924.G03.gz43_245338
M00043308A:F06	ES 193	451456	1924.G04.gz43_245354
M00043309A:H06	ES 193	499693	1924.G17.gz43_245562
M00043310A:F01	ES 193	498509	1924.H03.gz43_245339
M00043310C:B04	ES 193	495105	1924.H08.gz43_245419
M00043311B:H08	ES 193	499700	1924.H18.gz43_245579
M00043312B:A10	ES 193	494325	1924.H24.gz43_245675
M00043312D:A02	ES 193	494306	1924.I10.gz43_245452
M00043313D:B04	ES 193	492544	1924.J11.gz43_245469
M00043315C:D05	ES 193	495951	1924.K14.gz43_245518
M00043316C:F06	ES 193	498951	1924.L15.gz43_245535
M00043316D:F04	ES 193	479604	1924.L19.gz43_245599
M00043316D:F09	ES 193	553779	1924.L21.gz43_245631
M00043317B:B12	ES 193	494625	1924.M04.gz43_245360
M00043317D:C02	ES 193	451081	1924.M11.gz43_245472
M00043318A:G05	ES 193	454815	1924.M17.gz43_245568
M00043319A:D01	ES 193	562516	1924.N19.gz43_245601
M00043321B:E05	ES 193	490401	1924.P05.gz43_245379
M00043322C:F07	ES 193	446732	1924.P23.gz43_245667
M00043324D:D05	ES 193	451245	1933.A19.gz43_245972
M00043326A:H06	ES 193	500040	1933.B12.gz43_245861
M00043328A:E12	ES 193	496909	1933.C10.gz43_245830
M00043329B:H07	ES 193	492779	1933.C17.gz43_245942
M00043329C:D12	ES 193	453068	1933.C18.gz43_245958
M00043330D:G05	ES 193	412621	1933.D06.gz43_245767
M00043331C:G01	ES 193	491933	1933.D10.gz43_245831
M00043332A:D06	ES 193	454873	1933.D15.gz43_245911
M00043332A:E05	ES 193	490550	1933.D16.gz43_245927
M00043334A:F10	ES 193	491212	1933.E07.gz43_245784
M00043335A:D04	ES 193	450252	1933.E21.gz43_246008
M00043335D:E02	ES 193	450283	1933.F05.gz43_245753
M00043336A:D01	ES 193	496678	1933.F08.gz43_245801
M00043336C:A04	ES 193	450804	1933.F18.gz43_245961
M00043337A:C12	ES 193	495610	1933.G03.gz43_245722
M00043340A:B05	ES 193	494973	1933.H02.gz43_245707
M00043340B:B04	ES 193	453078	1933.H03.gz43_245723

Table 13

CloneID	ES No	ClusterID	SequenceName
M00043340D:C03	ES 193	447057	1933.H09.gz43_245819
M00043342B:H07	ES 193	450727	1933.I02.gz43_245708
M00043342C:G02	ES 193	492629	1933.I06.gz43_245772
M00043342D:D09	ES 193	128697	1933.I09.gz43_245820
M00043343B:B10	ES 193	451307	1933.I15.gz43_245916
M00043343D:H03	ES 193	492887	1933.J04.gz43_245741
M00043344C:C11	ES 193	450027	1933.J15.gz43_245917
M00043346D:E10	ES 193	449299	1933.K07.gz43_245790
M00043348A:D02	ES 193	450129	1933.K16.gz43_245934
M00043349A:C08	ES 193	448927	1933.L01.gz43_245695
M00043351C:A07	ES 193	494271	1933.M05.gz43_245760
M00043353D:E12	ES 193	496870	1933.N10.gz43_245841
M00043354A:C12	ES 193	529733	1933.N13.gz43_245889
M00043354A:E06	ES 193	561712	1933.N14.gz43_245905
M00043354B:C04	ES 193	561480	1933.N18.gz43_245969
M00043354B:F12	ES 193	561834	1933.N20.gz43_246001
M00043354D:C01	ES 193	448110	1933.O05.gz43_245762
M00043354D:G01	ES 193	515328	1933.O10.gz43_245842
M00043354D:G02	ES 193	552445	1933.O11.gz43_245858
M00043354D:H08	ES 193	553594	1933.O12.gz43_245874
M00043355A:D01	ES 193	561593	1933.O18.gz43_245970
M00043355B:B01	ES 193	552687	1933.O23.gz43_246050
M00043355B:D12	ES 193	517346	1933.O24.gz43_246066
M00043355C:G12	ES 193	487106	1933.P08.gz43_245811
M00043356B:E12	ES 193	452586	1934.A03.gz43_253031
M00043356C:F03	ES 193	448230	1934.A06.gz43_253079
M00043356C:H07	ES 193	447429	1934.A07.gz43_253095
M00043357A:G04	ES 193	450583	1934.A11.gz43_253159
M00043357B:B02	ES 193	487893	1934.A12.gz43_253175
M00043357B:D01	ES 193	450189	1934.A13.gz43_253191
M00043358A:D02	ES 193	450242	1934.A21.gz43_253319
M00043358B:D06	ES 193	450122	1934.A23.gz43_253351
M00043358C:F07	ES 193	449061	1934.B04.gz43_253048
M00043359B:A04	ES 193	449795	1934.B09.gz43_253128
M00043359B:D06	ES 193	450193	1934.B11.gz43_253160
M00043359C:C06	ES 193	449994	1934.B14.gz43_253208
M00043360C:E07	ES 193	452719	1934.C01.gz43_253001
M00043360C:F11	ES 194	491177	1934.C03.gz43_253033
M00043360D:D01	ES 194	489368	1934.C05.gz43_253065
M00043361B:F02	ES 194	491402	1934.C08.gz43_253113
M00043361D:A02	ES 194	450080	1934.C10.gz43_253145
M00043362C:E02	ES 194	490846	1934.C18.gz43_253273
M00043363A:G03	ES 194	492022	1934.D02.gz43_253018



Table 13

CloneID	ES No	ClusterID	SequenceName
M00043363B:A11	ES 194	450756	1934.D04.gz43_253050
M00043363D:F07	ES 194	491507	1934.D12.gz43_253178
M00043364B:H10	ES 194	447355	1934.D21.gz43_253322
M00043364D:H11	ES 194	450756	1934.E05.gz43_253067
M00043365A:C06	ES 194	449956	1934.E08.gz43_253115
M00043365B:A10	ES 194	486833	1934.E11.gz43_253163
M00043365B:C08	ES 194	488613	1934.E13.gz43_253195
M00043365C:A09	ES 194	449780	1934.E16.gz43_253243
M00043365C:F06	ES 194	491240	1934.E19.gz43_253291
M00043366A:B12	ES 194	488023	1934.E24.gz43_253371
M00043366D:B07	ES 194	488310	1934.F09.gz43_253132
M00043367C:D10	ES 194	450147	1934.F14.gz43_253212
M00043368A:F03	ES 194	491492	1934.F16.gz43_253244
M00043369D:B01	ES 194	449842	1934.G02.gz43_253021
M00043369D:G10	ES 194	450551	1934.G07.gz43_253101
M00043370A:C08	ES 194	449959	1934.G08.gz43_253117
M00043370B:D08	ES 194	450207	1934.G14.gz43_253213
M00043371A:D06	ES 194	490060	1934.G19.gz43_253293
M00043371B:C10	ES 194	450080	1934.G22.gz43_253341
M00043371C:B02	ES 194	449908	1934.G23.gz43_253357
M00043372B:A07	ES 194	43013	1934.H05.gz43_253070
M00043372B:B01	ES 194	455707	1934.H06.gz43_253086
M00043373A:G11	ES 194	452710	1934.H19.gz43_253294
M00043373B:G12	ES 194	450658	1934.H24.gz43_253374
M00043373D:G04	ES 194	456492	1934.I04.gz43_253055
M00043374A:E05	ES 194	560213	1934.I08.gz43_253119
M00043374A:G04	ES 194	510272	1934.I10.gz43_253151
M00043374D:D07	ES 194	631526	1934.I15.gz43_253231
M00043374D:H09	ES 194	515423	1934.I17.gz43_253263
M00043375A:E01	ES 194	451292	1934.I20.gz43_253311
M00043375A:E02	ES 194	451294	1934.I21.gz43_253327
M00043375B:A04	ES 194	456103	1934.I24.gz43_253375
M00043376B:C03	ES 194	451144	1934.J07.gz43_253104
M00043376B:F06	ES 194	450482	1934.J08.gz43_253120
M00043376D:A04	ES 194	493622	1934.J11.gz43_253168
M00043376D:A12	ES 194	233814	1934.J12.gz43_253184
M00043376D:D12	ES 194	451185	1934.J14.gz43_253216
M00043377C:A11	ES 194	449959	1934.J20.gz43_253312
M00043377D:E01	ES 194	451361	1934.J22.gz43_253344
M00043378B:B05	ES 194	494450	1934.J24.gz43_253376
M00043378D:D12	ES 194	496084	1934.K05.gz43_253073
M00043379C:B09	ES 194	451011	1934.K13.gz43_253201
M00043379D:A05	ES 194	494099	1934.K16.gz43_253249
M00043380D:E10	ES 194	450193	1934.L05.gz43_253074

Table 13

CloneID	ES No	ClusterID	SequenceName
M00043380D:E11	ES 194	451326	1934.L06.gz43_253090
M00043381B:E10	ES 194	551380	1934.L14.gz43_253218
M00043381C:D08	ES 194	561641	1934.L16.gz43_253250
M00043381C:E10	ES 194	556511	1934.L18.gz43_253282
M00043381D:F09	ES 194	467035	1934.L24.gz43_253378
M00043382C:D07	ES 194	496586	1934.M03.gz43_253043
M00043382C:G09	ES 194	499240	1934.M05.gz43_253075
M00043383B:F12	ES 194	456367	1934.M11.gz43_253171
M00043383D:C07	ES 194	495143	1934.M14.gz43_253219
M00043383D:G07	ES 194	451467	1934.M15.gz43_253235
M00043384B:A04	ES 194	487437	1934.M18.gz43_253283
M00043384C:A07	ES 194	487448	1934.M20.gz43_253315
M00043384C:C02	ES 194	489207	1934.M22.gz43_253347
M00043384C:G01	ES 194	492627	1934.M24.gz43_253379
M00043384D:D05	ES 194	489506	1934.N02.gz43_253028
M00043385A:E01	ES 194	496760	1934.N06.gz43_253092
M00043385A:G12	ES 194	448448	1934.N08.gz43_253124
M00043385C:D06	ES 194	496234	1934.N11.gz43_253172
M00043386A:A11	ES 194	450819	1934.N16.gz43_253252
M00043387A:E02	ES 194	490393	1934.O03.gz43_253045
M00043387A:E03	ES 194	490395	1934.O04.gz43_253061
M00043387B:A03	ES 194	486856	1934.O09.gz43_253141
M00043387C:A11	ES 194	487183	1934.O14.gz43_253221
M00043387C:G08	ES 194	455460	1934.O18.gz43_253285
M00043387D:A02	ES 194	449802	1934.O21.gz43_253333
M00043387D:B02	ES 194	488030	1934.O22.gz43_253349
M00043387D:D06	ES 194	450211	1934.O23.gz43_253365
M00043388A:D05	ES 194	453893	1934.P02.gz43_253030
M00043388B:C02	ES 194	489275	1934.P04.gz43_253062
M00043389D:B10	ES 194	488349	1934.P16.gz43_253254
M00043390B:C04	ES 194	449978	1934.P20.gz43_253318
M00043391D:D05	ES 194	217042	1935.A19.gz43_246512
M00043392C:F02	ES 194	491448	1935.B05.gz43_246289
M00043397B:H07	ES 194	335078	1935.D06.gz43_246307
M00043397C:G02	ES 194	450623	1935.D08.gz43_246339
M00043401A:E09	ES 194	490805	1935.E18.gz43_246500
M00043402C:F12	ES 194	456213	1935.F12.gz43_246405
M00043403B:A12	ES 194	450335	1935.F18.gz43_246501
M00043406D:C04	ES 194	448924	1935.H08.gz43_246343
M00043407C:H08	ES 194	451456	1935.H15.gz43_246455
M00043407D:G06	ES 194	498629	1935.H17.gz43_246487
M00043409C:C07	ES 194	402070	1935.I07.gz43_246328
M00043410C:C05	ES 194	451781	1935.I17.gz43_246488
M00043501A:D07	ES 194	553890	1935.K06.gz43_246314

Table 13

CloneID	ES No	ClusterID	SequenceName
M00043501D:C01	ES 194	562378	1935.K19.gz43_246522
M00043502A:H01	ES 194	491644	1935.L06.gz43_246315
M00043503C:F08	ES 194	402823	1935.M10.gz43_246380
M00043504A:E06	ES 194	477674	1935.M23.gz43_246588
M00043504B:C02	ES 194	635439	1935.N06.gz43_246317
M00043504C:E03	ES 194	555399	1935.N16.gz43_246477
M00043504D:G08	ES 194	446964	1935.N22.gz43_246573
M00043505B:G03	ES 194	562886	1935.O08.gz43_246350
M00043505B:G07	ES 194	558055	1935.O09.gz43_246366
M00043506D:F06	ES 194	522703	1935.P24.gz43_246607
M00043508A:H02	ES 194	456742	1936.B10.gz43_246753
M00043508B:G11	ES 194	562823	1936.B18.gz43_246881
M00043508D:C01	ES 194	414739	1936.C08.gz43_246722
M00054486B:E09	ES 194	562382	1936.D18.gz43_246883
M00054486B:H01	ES 194	549757	1936.D21.gz43_246931
M00054487C:A01	ES 194	559574	1936.E21.gz43_246932
M00054488A:F01	ES 194	556768	1936.F13.gz43_246805
M00054488C:D04	ES 194	564967	1936.G03.gz43_246646
M00054492A:D04	ES 194	449978	1936.I15.gz43_246840
M00054493C:E04	ES 194	489368	1936.J16.gz43_246857
M00054494A:H04	ES 194	549853	1936.K05.gz43_246682
M00054494D:A10	ES 194	560188	1936.K13.gz43_246810
M00054497B:C10	ES 194	560275	1936.M05.gz43_246684
M00054497C:G12	ES 194	450037	1936.M10.gz43_246764
M00054497D:A04	ES 194	554908	1936.M11.gz43_246780
M00054498C:B08	ES 194	558500	1936.N04.gz43_246669
M00054498D:F01	ES 194	449000	1936.N11.gz43_246781
M00054500A:F04	ES 194	559720	1936.O08.gz43_246734
M00054501A:E11	ES 194	552920	1936.O23.gz43_246974
M00054501A:G12	ES 194	488171	1936.O24.gz43_246990
M00054501C:E08	ES 194	481057	1936.P05.gz43_246687
M00054502C:E02	ES 194	550571	1936.P24.gz43_246991
M00054502C:H10	ES 194	449776	1945.A02.gz43_248938
M00054503D:E07	ES 194	562019	1945.B03.gz43_248955
M00054504B:A04	ES 194	524721	1945.B11.gz43_249083
M00054504D:E02	ES 194	551475	1945.B21.gz43_249243
M00054504D:G07	ES 194	289201	1945.B23.gz43_249275
M00054505A:G12	ES 194	572807	1945.C05.gz43_248988
M00054506A:D05	ES 194	554839	1945.C24.gz43_249292
M00054506B:A07	ES 194	388055	1945.D04.gz43_248973
M00054506B:H01	ES 194	550986	1945.D11.gz43_249085
M00054507B:A07	ES 194	505907	1945.E05.gz43_248990
M00054508B:E08	ES 194	557681	1945.F12.gz43_249103
M00054508C:B04	ES 194	550129	1945.F15.gz43_249151

Table 13

CloneID	ES No	ClusterID	SequenceName
M00054508C:C08	ES 194	555771	1945.F17.gz43_249183
M00054509A:C01	ES 194	547866	1945.F23.gz43_249279
M00054509B:F01	ES 194	559127	1945.G08.gz43_249040
M00054509C:G01	ES 194	499696	1945.G11.gz43_249088
M00054510C:G07	ES 194	452471	1945.H07.gz43_249025
M00054511A:D11	ES 194	570573	1945.H15.gz43_249153
M00054511B:C06	ES 194	389065	1945.H19.gz43_249217
M00054512D:H08	ES 194	487658	1945.I24.gz43_249298
M00054513A:B08	ES 194	550063	1945.J03.gz43_248963
M00054513A:F09	ES 194	455814	1945.J05.gz43_248995
M00054513B:E11	ES 194	551518	1945.J07.gz43_249027
M00054513C:A01	ES 194	555660	1945.J09.gz43_249059
M00054513D:F04	ES 194	550678	1945.J13.gz43_249123
M00054514C:B01	ES 194	461313	1945.J21.gz43_249251
M00054515B:E11	ES 194	554246	1945.K13.gz43_249124
M00054516C:A04	ES 194	559343	1945.L14.gz43_249141
M00054516D:F09	ES 194	554456	1945.L21.gz43_249253
M00054517A:C01	ES 194	488023	1945.L23.gz43_249285
M00054517B:B04	ES 194	549129	1945.M05.gz43_248998
M00054518C:F11	ES 194	549581	1945.N05.gz43_248999
M00054518D:D03	ES 194	552905	1945.N09.gz43_249063
M00054519A:C04	ES 194	554611	1945.N11.gz43_249095
M00054521D:H01	ES 194	572992	1945.O18.gz43_249208
M00054523C:A11	ES 194	458974	1945.P23.gz43_249289
M00054523D:D07	ES 194	558497	1946.A06.gz43_249386
M00054523D:E08	ES 194	550022	1946.A08.gz43_249418
M00054523D:G09	ES 194	454336	1946.A10.gz43_249450
M00054525D:H05	ES 194	559676	1946.B07.gz43_249403
M00054526A:E04	ES 194	550475	1946.B11.gz43_249467
M00054526B:C09	ES 194	556809	1946.B15.gz43_249531
M00054526C:F03	ES 194	524966	1946.B19.gz43_249595
M00054527B:A07	ES 194	552006	1946.C06.gz43_249388
M00054529A:H01	ES 194	585380	1946.D21.gz43_249629
M00054529C:D11	ES 194	551157	1946.E06.gz43_249390
M00054529D:E01	ES 194	490308	1946.E10.gz43_249454
M00054530D:C10	ES 194	312036	1946.E23.gz43_249662
M00054530D:H07	ES 194	553002	1946.E24.gz43_249678
M00054531D:F05	ES 194	584071	1946.F11.gz43_249471
M00054532A:A07	ES 194	549919	1946.F13.gz43_249503
M00054532B:C05	ES 194	550204	1946.F21.gz43_249631
M00054532D:A01	ES 194	559574	1946.G06.gz43_249392
M00054532D:E07	ES 194	526984	1946.G08.gz43_249424
M00054533A:F05	ES 194	571899	1946.G12.gz43_249488
M00054533B:F04	ES 194	550714	1946.G20.gz43_249616

Table 13

CloneID	ES No	ClusterID	SequenceName
M00054533C:B04	ES 194	556940	1946.H01.gz43_249313
M00054533C:E07	ES 194	466020	1946.H05.gz43_249377
M00054534A:B06	ES 194	498433	1946.H15.gz43_249537
M00054534D:D02	ES 194	556216	1946.I06.gz43_249394
M00054535A:G03	ES 194	553338	1946.I14.gz43_249522
M00054535B:H08	ES 194	560205	1946.I22.gz43_249650
M00054536B:A03	ES 194	550018	1946.J07.gz43_249411
M00054536B:D02	ES 194	550370	1946.J10.gz43_249459
M00054536B:F08	ES 194	550730	1946.J11.gz43_249475
M00054536C:B11	ES 194	555019	1946.J15.gz43_249539
M00054536C:D12	ES 195	82864	1946.J17.gz43_249571
M00054537B:H03	ES 195	451778	1946.K02.gz43_249332
M00054537C:B03	ES 195	51103	1946.K06.gz43_249396
M00054538A:E10	ES 195	455821	1946.K16.gz43_249556
M00054538B:B05	ES 195	550172	1946.K18.gz43_249588
M00054538D:F05	ES 195	557339	1946.L07.gz43_249413
M00054538D:G12	ES 195	550830	1946.L11.gz43_249477
M00054538D:H11	ES 195	560014	1946.L13.gz43_249509
M00054539B:D06	ES 195	560519	1946.L17.gz43_249573
M00054539B:G03	ES 195	549734	1946.L19.gz43_249605
M00054540A:H07	ES 195	464154	1946.M10.gz43_249462
M00054541B:A09	ES 195	549233	1946.M22.gz43_249654
M00054541C:C10	ES 195	493575	1946.N03.gz43_249351
M00054541C:F11	ES 195	481594	1946.N09.gz43_249447
M00054542B:B01	ES 195	409262	1946.N17.gz43_249575
M00054542C:B12	ES 195	558024	1946.N21.gz43_249639
M00054543B:E06	ES 195	552638	1946.O12.gz43_249496
M00054543C:F01	ES 195	552753	1946.O18.gz43_249592
M00054543D:G08	ES 195	549131	1946.P01.gz43_249321
M00054544B:E03	ES 195	550618	1946.P09.gz43_249449
M00054544C:F04	ES 195	560717	1946.P17.gz43_249577
M00054545C:B09	ES 195	555502	1947.A10.gz43_253539
M00054545D:E04	ES 195	561406	1947.A14.gz43_253603
M00054553D:E09	ES 195	515707	1947.G22.gz43_253737
M00054555A:H09	ES 195	550952	1947.I06.gz43_253483
M00054555D:C03	ES 195	550246	1947.J01.gz43_253404
M00054566D:G08	ES 195	496586	1947.P21.gz43_253730
M00054567C:B03	ES 195	556065	1948.A04.gz43_249738
M00054567C:D09	ES 195	550403	1948.A07.gz43_249786
M00054568A:G02	ES 195	549716	1948.A14.gz43_249898
M00054568A:H03	ES 195	549858	1948.A16.gz43_249930
M00054568B:A07	ES 195	554793	1948.A17.gz43_249946
M00054568C:D06	ES 195	450963	1948.A21.gz43_250010

Table 13

CloneID	ES No	ClusterID	SequenceName
M00054568C:G12	ES 195	557656	1948.A23.gz43_250042
M00054569D:E01	ES 195	468613	1948.C02.gz43_249708
M00054570A:F02	ES 195	549597	1948.C08.gz43_249804
M00054571A:B10	ES 195	451049	1948.C21.gz43_250012
M00054572C:B12	ES 195	562805	1948.E07.gz43_249790
M00054572C:E09	ES 195	561876	1948.E11.gz43_249854
M00054572C:G05	ES 195	550035	1948.E13.gz43_249886
M00054574C:B11	ES 195	562725	1948.G01.gz43_249696
M00054574D:F11	ES 195	559300	1948.G10.gz43_249840
M00054575A:B06	ES 195	560080	1948.G12.gz43_249872
M00054575B:A07	ES 195	562469	1948.G16.gz43_249936
M00054576D:C07	ES 195	378610	1948.I02.gz43_249714
M00054577B:A09	ES 195	558729	1948.I13.gz43_249890
M00054577B:F01	ES 195	509202	1948.I19.gz43_249986
M00054579A:G10	ES 195	550804	1948.K03.gz43_249732
M00054579B:C11	ES 195	454205	1948.K07.gz43_249796
M00054579B:D10	ES 195	553749	1948.K08.gz43_249812
M00054579C:A10	ES 195	552907	1948.K11.gz43_249860
M00054579D:D08	ES 195	313600	1948.K18.gz43_249972
M00054580A:B11	ES 195	528404	1948.K21.gz43_250020
M00054580A:C10	ES 195	492139	1948.K22.gz43_250036
M00054580A:D03	ES 195	550318	1948.K23.gz43_250052
M00054580A:D04	ES 195	570248	1948.K24.gz43_250068
M00054581B:A01	ES 195	559752	1948.M02.gz43_249718
M00054581B:D03	ES 195	550397	1948.M04.gz43_249750
M00054581B:G10	ES 195	550874	1948.M05.gz43_249766
M00054581D:C12	ES 195	555000	1948.M10.gz43_249846
M00054581D:D01	ES 195	556488	1948.M11.gz43_249862
M00054581D:E04	ES 195	556336	1948.M12.gz43_249878
M00054581D:G02	ES 195	550811	1948.M13.gz43_249894
M00054582A:A05	ES 195	568467	1948.M14.gz43_249910
M00054582A:A07	ES 195	549994	1948.M15.gz43_249926
M00054583A:B04	ES 195	550106	1948.N13.gz43_249895
M00054583A:F05	ES 195	550694	1948.N14.gz43_249911
M00054583D:E04	ES 195	394567	1948.O01.gz43_249704
M00054584A:A07	ES 195	549956	1948.O03.gz43_249736
M00054584A:B03	ES 195	533812	1948.O05.gz43_249768
M00054584B:A03	ES 195	554887	1948.O10.gz43_249848
M00054584B:G03	ES 195	572249	1948.O13.gz43_249896
M00054584D:C01	ES 195	466020	1948.O17.gz43_249960
M00054585A:E07	ES 195	160320	1948.O21.gz43_250024
M00054586A:F05	ES 195	550662	1948.P19.gz43_249993
M00054586C:H02	ES 195	560751	1957.A05.gz43_250138
M00054586D:A03	ES 195	559857	1957.A06.gz43_250154

Table 13

CloneID	ES No	ClusterID	SequenceName
M00054586D:G01	ES 195	559419	1957.A09.gz43_250202
M00054587A:A08	ES 195	558413	1957.A13.gz43_250266
M00054587A:F06	ES 195	471181	1957.A16.gz43_250314
M00054587A:F09	ES 195	452506	1957.A18.gz43_250346
M00054587B:F06	ES 195	562174	1957.A23.gz43_250426
M00054587C:G02	ES 195	535129	1957.B03.gz43_250107
M00054587D:D04	ES 195	550322	1957.B05.gz43_250139
M00054588A:G08	ES 195	550855	1957.B11.gz43_250235
M00054588B:B12	ES 195	553331	1957.B13.gz43_250267
M00054588C:F04	ES 195	550217	1957.B19.gz43_250363
M00054589A:D09	ES 195	555920	1957.C04.gz43_250124
M00054589A:E05	ES 195	477097	1957.C05.gz43_250140
M00054589B:A07	ES 195	446164	1957.C06.gz43_250156
M00054589B:F05	ES 195	551463	1957.C10.gz43_250220
M00054589B:G10	ES 195	43656	1957.C13.gz43_250268
M00054589C:G11	ES 195	427723	1957.C18.gz43_250348
M00054589D:C06	ES 195	556376	1957.C20.gz43_250380
M00054590A:A01	ES 195	447311	1957.C23.gz43_250428
M00054590A:C10	ES 195	553755	1957.D02.gz43_250093
M00054590A:E02	ES 195	550594	1957.D03.gz43_250109
M00054590B:B11	ES 195	550088	1957.D06.gz43_250157
M00054590C:A03	ES 195	498827	1957.D08.gz43_250189
M00054590D:B01	ES 195	550084	1957.D16.gz43_250317
M00054590D:C12	ES 195	551975	1957.D18.gz43_250349
M00054591C:A01	ES 195	550044	1957.E04.gz43_250126
M00054591C:H09	ES 195	554764	1957.E06.gz43_250158
M00054591D:G11	ES 195	550886	1957.E11.gz43_250238
M00054592A:D09	ES 195	550315	1957.E17.gz43_250334
M00054592C:A05	ES 195	549964	1957.E20.gz43_250382
M00054593A:D01	ES 195	547509	1957.F03.gz43_250111
M00054593B:B03	ES 195	473859	1957.F09.gz43_250207
M00054593B:E03	ES 195	557970	1957.F12.gz43_250255
M00054593D:B11	ES 195	550153	1957.F18.gz43_250351
M00054594A:D04	ES 195	561836	1957.G01.gz43_250080
M00054594C:E06	ES 195	498777	1957.G08.gz43_250192
M00054595B:A11	ES 195	161489	1957.G20.gz43_250384
M00054595B:C12	ES 195	560357	1957.G23.gz43_250432
M00054595B:H09	ES 195	485431	1957.H06.gz43_250161
M00054595C:G06	ES 195	549665	1957.H12.gz43_250257
M00054595D:A10	ES 195	485029	1957.H18.gz43_250353
M00054596A:G11	ES 195	549731	1957.H24.gz43_250449
M00054596B:C01	ES 195	447356	1957.I04.gz43_250130
M00054596C:A06	ES 195	451594	1957.I11.gz43_250242
M00054596C:F09	ES 195	549609	1957.I14.gz43_250290

Table 13

CloneID	ES No	ClusterID	SequenceName
M00054596C:F10	ES 195	455298	1957.I15.gz43_250306
M00054596C:G09	ES 195	561130	1957.I17.gz43_250338
M00054597A:A07	ES 195	467035	1957.I23.gz43_250434
M00054597A:C11	ES 195	558332	1957.J01.gz43_250083
M00054597A:D08	ES 195	558981	1957.J02.gz43_250099
M00054597A:G08	ES 195	549781	1957.J03.gz43_250115
M00054597B:F09	ES 195	493622	1957.J08.gz43_250195
M00054597D:E12	ES 195	461718	1957.J17.gz43_250339
M00054597D:F08	ES 195	449649	1957.J19.gz43_250371
M00054599B:A12	ES 195	446783	1957.K18.gz43_250356
M00054599B:C06	ES 195	549228	1957.K20.gz43_250388
M00054599B:F09	ES 195	549611	1957.K23.gz43_250436
M00054599C:E05	ES 195	561593	1957.L06.gz43_250165
M00054599D:B07	ES 195	559883	1957.L08.gz43_250197
M00054600A:G12	ES 195	559554	1957.L17.gz43_250341
M00054600A:H03	ES 195	549816	1957.L18.gz43_250357
M00054600C:B10	ES 195	459581	1957.L20.gz43_250389
M00054600C:D03	ES 195	554193	1957.L22.gz43_250421
M00054600D:H07	ES 195	554869	1957.M08.gz43_250198
M00054601A:E08	ES 195	555949	1957.M09.gz43_250214
M00054601B:D08	ES 195	446503	1957.M12.gz43_250262
M00054602A:B03	ES 195	550085	1957.M23.gz43_250438
M00054602A:E06	ES 195	416884	1957.N05.gz43_250151
M00054602C:B06	ES 195	547509	1957.N15.gz43_250311
M00054602C:C12	ES 195	487176	1957.N16.gz43_250327
M00054602D:A06	ES 195	562722	1957.N20.gz43_250391
M00054603A:G06	ES 195	552907	1957.O07.gz43_250184
M00054603A:G12	ES 195	552913	1957.O09.gz43_250216
M00054603B:B04	ES 195	526733	1957.O11.gz43_250248
M00054603B:C09	ES 195	447308	1957.O13.gz43_250280
M00054603B:G08	ES 195	356058	1957.O16.gz43_250328
M00054603C:G09	ES 195	408130	1957.O18.gz43_250360
M00054603D:B02	ES 195	552121	1957.O20.gz43_250392
M00054604C:B05	ES 195	562529	1957.P07.gz43_250185
M00054604C:F03	ES 195	549599	1957.P12.gz43_250265
M00054604D:A04	ES 195	563514	1957.P15.gz43_250313
M00054605A:A03	ES 195	558927	1957.P18.gz43_250361
M00054605B:F10	ES 195	460493	1957.P24.gz43_250457
M00054605B:G01	ES 195	549649	1958.A02.gz43_250474
M00054605C:A04	ES 195	548864	1958.A05.gz43_250522
M00054605C:D03	ES 195	188753	1958.A06.gz43_250538
M00054605C:H02	ES 195	549810	1958.A09.gz43_250586
M00054606A:A03	ES 195	449994	1958.A13.gz43_250650
M00054606A:D02	ES 195	562508	1958.A16.gz43_250698



Table 13

CloneID	ES No	ClusterID	SequenceName
M00054606C:B06	ES 195	549131	1958.A23.gz43_250810
M00054606C:E04	ES 195	549481	1958.B01.gz43_250459
M00054606D:B05	ES 195	557190	1958.B02.gz43_250475
M00054607A:B06	ES 195	560862	1958.B05.gz43_250523
M00054607A:G02	ES 195	552823	1958.B07.gz43_250555
M00054608B:D08	ES 195	490393	1958.B19.gz43_250747
M00054608C:H04	ES 195	549889	1958.B24.gz43_250827
M00054609A:D01	ES 195	423947	1958.C05.gz43_250524
M00054609A:F01	ES 195	561892	1958.C08.gz43_250572
M00054609A:H04	ES 195	549912	1958.C09.gz43_250588
M00054609B:E01	ES 195	556530	1958.C12.gz43_250636
M00054609B:H11	ES 195	507349	1958.C13.gz43_250652
M00054609C:G06	ES 195	549779	1958.C17.gz43_250716
M00054609D:E12	ES 195	490152	1958.C22.gz43_250796
M00054609D:H06	ES 195	549829	1958.C24.gz43_250828
M00054610A:E05	ES 195	558332	1958.D05.gz43_250525
M00054611B:F12	ES 195	549626	1958.E13.gz43_250654
M00054611B:G09	ES 195	478511	1958.E14.gz43_250670
M00054611C:C02	ES 195	561144	1958.E16.gz43_250702
M00054611C:E01	ES 195	555660	1958.E18.gz43_250734
M00054612A:D12	ES 195	549347	1958.F08.gz43_250575
M00054612B:B11	ES 195	549114	1958.F10.gz43_250607
M00054612B:E02	ES 195	488108	1958.F12.gz43_250639
M00054612D:B12	ES 195	552364	1958.F22.gz43_250799
M00054613A:D07	ES 195	550177	1958.G06.gz43_250544
M00054613B:H04	ES 195	550018	1958.G11.gz43_250624
M00054613D:H09	ES 195	553028	1958.G21.gz43_250784
M00054614A:G11	ES 196	557559	1958.G24.gz43_250832
M00054614B:E01	ES 196	405042	1958.H01.gz43_250465
M00054615B:E03	ES 196	497477	1958.H16.gz43_250705
M00054615C:D09	ES 196	557947	1958.H23.gz43_250817
M00054616A:H01	ES 196	553758	1958.I15.gz43_250690
M00054616A:H03	ES 196	481360	1958.I16.gz43_250706
M00054616D:C10	ES 196	552418	1958.J01.gz43_250467
M00054616D:G09	ES 196	549739	1958.J03.gz43_250499
M00054616D:H06	ES 196	513115	1958.J05.gz43_250531
M00054617A:C07	ES 196	553453	1958.J08.gz43_250579
M00054617B:A09	ES 196	548965	1958.J10.gz43_250611
M00054617B:C05	ES 196	549233	1958.J12.gz43_250643
M00054617B:D06	ES 196	549388	1958.J13.gz43_250659
M00054618B:B04	ES 196	549122	1958.K06.gz43_250548
M00054618C:H02	ES 196	555371	1958.K14.gz43_250676
M00054618D:D04	ES 196	552437	1958.K16.gz43_250708

Table 13

CloneID	ES No	ClusterID	SequenceName
M00054618D:E06	ES 196	490890	1958.K19.gz43_250756
M00054618D:E11	ES 196	451009	1958.K20.gz43_250772
M00054619A:C05	ES 196	447913	1958.K24.gz43_250836
M00054619C:F04	ES 196	554036	1958.L09.gz43_250597
M00054619D:C10	ES 196	562749	1958.L12.gz43_250645
M00054620A:C09	ES 196	553204	1958.L15.gz43_250693
M00054620B:B10	ES 196	552194	1958.L20.gz43_250773
M00054620C:C08	ES 196	448276	1958.L22.gz43_250805
M00054620C:C12	ES 196	560491	1958.L23.gz43_250821
M00054620D:D06	ES 196	561116	1958.M03.gz43_250502
M00054620D:D11	ES 196	473111	1958.M04.gz43_250518
M00054620D:F11	ES 196	556896	1958.M06.gz43_250550
M00054620D:G11	ES 196	395411	1958.M07.gz43_250566
M00054621B:A10	ES 196	548859	1958.M13.gz43_250662
M00054621C:G03	ES 196	451025	1958.M20.gz43_250774
M00054621D:A10	ES 196	518049	1958.M24.gz43_250838
M00054621D:C06	ES 196	558642	1958.N01.gz43_250471
M00054621D:D11	ES 196	549320	1958.N02.gz43_250487
M00054622A:D06	ES 196	27480	1958.N07.gz43_250567
M00054622A:H01	ES 196	561068	1958.N08.gz43_250583
M00054622B:F05	ES 196	491644	1958.N10.gz43_250615
M00054622B:H09	ES 196	556308	1958.N12.gz43_250647
M00054622D:C02	ES 196	562932	1958.N18.gz43_250743
M00054622D:D10	ES 196	551463	1958.N20.gz43_250775
M00054622D:F05	ES 196	485504	1958.N21.gz43_250791
M00054622D:G11	ES 196	556835	1958.N22.gz43_250807
M00054622D:H03	ES 196	453864	1958.N23.gz43_250823
M00054623B:B11	ES 196	556424	1958.O06.gz43_250552
M00054623C:E09	ES 196	558175	1958.O09.gz43_250600
M00054623D:C12	ES 196	551305	1958.O12.gz43_250648
M00054624A:B11	ES 196	550164	1958.O16.gz43_250712
M00054624B:G10	ES 196	559938	1958.O21.gz43_250792
M00054624D:B06	ES 196	554810	1958.O23.gz43_250824
M00054625A:D07	ES 196	558103	1958.P04.gz43_250521
M00054625A:E05	ES 196	557199	1958.P05.gz43_250537
M00054625B:B02	ES 196	551250	1958.P07.gz43_250569
M00054625D:F06	ES 196	562712	1958.P21.gz43_250793
M00054625D:H07	ES 196	461734	1958.P22.gz43_250809
M00054627A:B08	ES 196	556790	1959.A20.gz43_254083
M00054628C:G11	ES 196	557559	1959.C14.gz43_253989
M00054629C:G06	ES 196	555923	1959.D08.gz43_253894
M00054630A:D08	ES 196	562541	1959.D17.gz43_254038
M00054630B:A06	ES 196	551975	1959.D19.gz43_254070
M00054631D:C02	ES 196	552092	1959.F03.gz43_253816

Table 13

CloneID	ES No	ClusterID	SequenceName
M00054635B:G05	ES 196	268197	1959.H16.gz43_254026
M00054638D:F02	ES 196	555949	1959.K24.gz43_254157
M00054640B:C05	ES 196	549210	1959.M04.gz43_253839
M00054642D:F11	ES 196	549516	1959.N22.gz43_254128
M00054643B:G09	ES 196	552618	1959.O10.gz43_253937
M00054644B:F02	ES 196	557345	1959.P08.gz43_253906
M00054644D:F11	ES 196	549624	1959.P20.gz43_254098
M00054647D:H02	ES 196	502683	1960.B23.gz43_254516
M00054648C:H10	ES 196	450867	1960.C12.gz43_254341
M00054650A:B08	ES 196	410667	1960.D12.gz43_254342
M00054651D:D02	ES 196	452662	1960.E24.gz43_254535
M00054652B:A04	ES 196	387728	1960.F04.gz43_254216
M00054656C:E10	ES 196	561590	1960.I07.gz43_254267
M00054657D:E05	ES 196	551531	1960.J11.gz43_254332
M00054661A:B03	ES 196	193991	1960.L03.gz43_254206
M00054661D:A07	ES 196	551065	1960.L12.gz43_254350
M00054663D:D09	ES 196	466851	1960.M24.gz43_254543
M00054664D:A01	ES 196	264575	1960.N14.gz43_254384
M00054668A:D01	ES 196	450624	1969.A10.gz43_254691
M00054670D:F10	ES 196	556424	1969.B21.gz43_254868
M00054671A:H07	ES 196	579481	1969.C07.gz43_254645
M00054671D:A12	ES 196	573733	1969.C24.gz43_254917
M00054672C:F01	ES 196	140763	1969.D20.gz43_254854
M00054673B:G08	ES 196	551845	1969.E09.gz43_254679
M00054674B:B03	ES 196	551269	1969.F03.gz43_254584
M00054677D:H08	ES 196	556959	1969.I02.gz43_254571
M00054683D:F01	ES 196	551630	1969.M04.gz43_254607
M00054685D:D09	ES 196	415326	1969.N11.gz43_254720
M00054689C:B11	ES 196	557935	1970.A03.gz43_263422
M00054689D:E12	ES 196	551527	1970.A06.gz43_263470
M00054690B:B02	ES 196	559389	1970.A14.gz43_263598
M00054690B:D10	ES 196	552418	1970.A16.gz43_263630
M00054690D:G03	ES 196	549388	1970.B04.gz43_263439
M00054692B:C06	ES 196	550330	1970.B20.gz43_263695
M00054692B:D01	ES 196	420686	1970.B21.gz43_263711
M00054692C:B02	ES 196	42994	1970.B23.gz43_263743
M00054692D:F09	ES 196	479208	1970.B24.gz43_263759
M00054693A:C09	ES 196	551243	1970.C05.gz43_263456
M00054693A:E06	ES 196	558938	1970.C08.gz43_263504
M00054693B:B01	ES 196	559036	1970.C09.gz43_263520
M00054693C:A02	ES 196	549995	1970.C14.gz43_263600
M00054693D:A05	ES 196	551150	1970.C18.gz43_263664
M00054693D:A08	ES 196	448332	1970.C19.gz43_263680
M00054693D:C04	ES 196	450755	1970.C20.gz43_263696

Table 13

CloneID	ES No	ClusterID	SequenceName
M00054695A:A12	ES 196	552051	1970.D08.gz43_263505
M00054696B:H11	ES 196	553128	1970.E06.gz43_263474
M00054697A:E03	ES 196	552649	1970.E12.gz43_263570
M00054697A:G06	ES 196	562216	1970.E14.gz43_263602
M00054697C:E11	ES 196	552581	1970.E21.gz43_263714
M00054699A:G01	ES 196	584499	1970.F15.gz43_263619
M00054699B:A05	ES 196	551996	1970.F16.gz43_263635
M00054699B:F05	ES 196	552733	1970.F18.gz43_263667
M00054699C:A04	ES 196	551995	1970.F21.gz43_263715
M00054699D:A12	ES 196	552055	1970.G02.gz43_263412
M00054700A:B03	ES 196	552254	1970.G04.gz43_263444
M00054700A:F12	ES 196	552733	1970.G06.gz43_263476
M00054701D:H05	ES 196	555255	1970.G23.gz43_263748
M00054702A:C06	ES 196	556896	1970.H01.gz43_263397
M00054702A:F03	ES 196	483141	1970.H02.gz43_263413
M00054702A:H03	ES 196	509202	1970.H03.gz43_263429
M00054702C:G06	ES 196	551754	1970.H09.gz43_263525
M00054702D:E07	ES 196	389201	1970.H12.gz43_263573
M00054702D:F05	ES 196	452392	1970.H14.gz43_263605
M00054702D:H10	ES 196	549945	1970.H16.gz43_263637
M00054703C:F01	ES 196	521552	1970.H22.gz43_263733
M00054703D:E07	ES 196	549238	1970.I01.gz43_263398
M00054703D:F04	ES 196	561434	1970.I02.gz43_263414
M00054704B:B11	ES 196	549038	1970.I06.gz43_263478
M00054704D:F02	ES 196	552682	1970.I12.gz43_263574
M00054705B:C08	ES 196	552314	1970.I14.gz43_263606
M00054705B:D02	ES 196	527679	1970.I16.gz43_263638
M00054705B:E04	ES 196	498454	1970.I18.gz43_263670
M00054705C:B02	ES 196	475730	1970.I21.gz43_263718
M00054705C:D11	ES 196	554477	1970.I24.gz43_263766
M00054705D:G03	ES 196	184995	1970.J03.gz43_263431
M00054706A:G10	ES 196	491827	1970.J09.gz43_263527
M00054706B:F10	ES 196	562884	1970.J15.gz43_263623
M00054706C:A04	ES 196	551955	1970.J17.gz43_263655
M00054706C:B12	ES 196	550053	1970.J19.gz43_263687
M00054706D:B03	ES 196	553358	1970.J22.gz43_263735
M00054707B:B08	ES 196	453708	1970.K02.gz43_263416
M00054707C:D02	ES 196	549151	1970.K06.gz43_263480
M00054707C:G07	ES 196	552894	1970.K09.gz43_263528
M00054708A:F11	ES 196	552686	1970.K12.gz43_263576
M00054708B:F04	ES 196	391511	1970.K16.gz43_263640
M00054709A:A10	ES 196	560317	1970.K24.gz43_263768
M00054710B:B10	ES 196	552197	1970.L17.gz43_263657
M00054710C:A12	ES 196	558768	1970.L22.gz43_263737

Table 13

CloneID	ES No	ClusterID	SequenceName
M00054710D:A02	ES 196	551941	1970.M01.gz43_263402
M00054711A:B05	ES 196	553685	1970.M05.gz43_263466
M00054711C:A08	ES 196	552073	1970.M11.gz43_263562
M00054712C:A04	ES 196	558046	1970.N01.gz43_263403
M00054712C:C07	ES 196	549557	1970.N05.gz43_263467
M00054713B:B10	ES 196	551479	1970.N14.gz43_263611
M00054713C:D07	ES 196	553938	1970.N18.gz43_263675
M00054714A:C05	ES 196	430917	1970.O01.gz43_263404
M00054714B:F05	ES 196	32021	1970.O06.gz43_263484
M00054714C:E01	ES 196	552625	1970.O09.gz43_263532
M00054715A:C06	ES 196	452559	1970.O15.gz43_263628
M00054715A:G02	ES 196	550975	1970.O17.gz43_263660
M00054715C:D05	ES 196	451032	1970.O23.gz43_263756
M00054715C:D11	ES 196	419281	1970.O24.gz43_263772
M00054715D:E11	ES 196	552598	1970.P07.gz43_263501
M00054715D:F09	ES 196	583641	1970.P08.gz43_263517
M00054716B:D06	ES 196	490393	1970.P16.gz43_263645
M00054716D:D03	ES 196	552497	1970.P23.gz43_263757
M00054717A:A03	ES 196	552086	1971.A01.gz43_246992
M00054717A:C07	ES 196	549550	1971.A03.gz43_247024
M00054717A:G09	ES 196	450278	1971.A06.gz43_247072
M00054717C:G07	ES 196	554913	1971.A18.gz43_247264
M00054718A:D11	ES 196	555571	1971.A24.gz43_247360
M00054718B:D03	ES 196	555837	1971.B05.gz43_247057
M00054719A:A02	ES 196	552028	1971.B13.gz43_247185
M00054719A:H06	ES 196	553012	1971.B16.gz43_247233
M00054720C:A01	ES 196	553123	1971.D01.gz43_246995
M00054720C:G10	ES 196	557714	1971.D05.gz43_247059
M00054720C:H01	ES 196	561313	1971.D06.gz43_247075
M00054721C:D11	ES 196	446999	1971.E05.gz43_247060
M00054722C:D01	ES 196	450410	1971.F05.gz43_247061
M00054722D:C08	ES 196	553316	1971.F09.gz43_247125
M00054724A:G02	ES 196	421959	1971.G14.gz43_247206
M00054724B:F06	ES 196	551826	1971.G18.gz43_247270
M00054724D:C05	ES 196	561636	1971.H01.gz43_246999
M00054724D:G12	ES 196	553805	1971.H07.gz43_247095
M00054725A:A03	ES 196	448136	1971.H09.gz43_247127
M00054725A:A05	ES 196	551096	1971.H10.gz43_247143
M00054725A:F09	ES 196	555491	1971.H11.gz43_247159
M00054725A:H06	ES 196	86175	1971.H12.gz43_247175
M00054725B:G12	ES 196	555676	1971.H19.gz43_247287
M00054725D:F04	ES 196	553731	1971.I04.gz43_247048
M00054726A:B11	ES 196	552933	1971.I07.gz43_247096
M00054726A:D02	ES 196	555818	1971.I09.gz43_247128

Table 13

CloneID	ES No	ClusterID	SequenceName
M00054726A:E01	ES 197	551487	1971.I10.gz43_247144
M00054726B:F08	ES 197	553739	1971.I16.gz43_247240
M00054726B:F09	ES 197	557747	1971.I17.gz43_247256
M00054726C:D10	ES 197	449035	1971.I21.gz43_247320
M00054726C:E07	ES 197	524721	1971.I22.gz43_247336
M00054727A:B12	ES 197	553264	1971.J09.gz43_247129
M00054727D:C06	ES 197	496772	1971.K01.gz43_247002
M00054728B:C10	ES 197	557356	1971.K09.gz43_247130
M00054728C:B08	ES 197	559113	1971.K13.gz43_247194
M00054728D:B07	ES 197	554048	1971.K18.gz43_247274
M00054729B:A08	ES 197	484043	1971.L05.gz43_247067
M00054729B:B03	ES 197	557426	1971.L06.gz43_247083
M00054729B:E06	ES 197	451812	1971.L09.gz43_247131
M00054729C:C08	ES 197	561830	1971.L12.gz43_247179
M00054729C:G07	ES 197	562263	1971.L15.gz43_247227
M00054729D:D05	ES 197	550315	1971.L18.gz43_247275
M00054730B:F11	ES 197	559380	1971.M11.gz43_247164
M00054731A:D07	ES 197	452488	1971.N05.gz43_247069
M00054731B:C12	ES 197	553310	1971.N13.gz43_247197
M00054731B:D04	ES 197	448453	1971.N14.gz43_247213
M00054731B:G02	ES 197	553751	1971.N17.gz43_247261
M00054731C:H12	ES 197	553869	1971.N24.gz43_247373
M00054731D:H11	ES 197	215005	1971.O04.gz43_247054
M00054732A:B07	ES 197	561379	1971.O06.gz43_247086
M00054734B:C06	ES 197	556654	1971.P10.gz43_247151
M00054734B:G10	ES 197	549288	1971.P15.gz43_247231
M00054734C:A07	ES 197	553108	1971.P17.gz43_247263
M00054735A:G09	ES 197	552686	1971.P24.gz43_247375
M00054736B:H03	ES 197	522322	1972.B13.gz43_247569
M00054737B:H11	ES 197	556167	1972.C05.gz43_247442
M00054737C:B01	ES 197	454186	1972.C06.gz43_247458
M00054738B:E12	ES 197	560282	1972.C21.gz43_247698
M00054738D:F01	ES 197	558679	1972.D13.gz43_247571
M00054738D:G07	ES 197	495832	1972.D15.gz43_247603
M00054739A:F07	ES 197	555773	1972.D24.gz43_247747
M00054739C:B12	ES 197	466235	1972.E08.gz43_247492
M00054739C:E05	ES 197	450142	1972.E12.gz43_247556
M00054740C:H08	ES 197	493122	1972.F15.gz43_247605
M00054741C:D08	ES 197	493135	1972.G15.gz43_247606
M00054741D:C05	ES 197	551778	1972.G19.gz43_247670
M00054743A:C07	ES 197	424723	1972.I03.gz43_247416
M00054743A:E04	ES 197	473455	1972.I04.gz43_247432
M00054743C:E11	ES 197	452257	1972.I13.gz43_247576

Table 13

CloneID	ES No	ClusterID	SequenceName
M00054743D:F04	ES 197	555077	1972.I19.gz43_247672
M00054744A:G10	ES 197	553834	1972.J05.gz43_247449
M00054744C:D02	ES 197	587854	1972.J16.gz43_247625
M00054744D:G02	ES 197	557068	1972.K03.gz43_247418
M00054745C:B12	ES 197	562793	1972.K15.gz43_247610
M00054745C:H02	ES 197	557871	1972.K19.gz43_247674
M00054745D:G09	ES 197	551441	1972.L04.gz43_247435
M00054746A:H02	ES 197	559494	1972.L09.gz43_247515
M00054746D:E05	ES 197	503452	1972.L22.gz43_247723
M00054747D:B05	ES 197	474309	1972.M24.gz43_247756
M00054748B:G10	ES 197	523753	1972.N13.gz43_247581
M00054748B:H09	ES 197	59202	1972.N14.gz43_247597
M00054750A:E11	ES 197	446997	1972.O06.gz43_247470
M00054750A:G10	ES 197	562323	1972.O09.gz43_247518
M00054750B:F02	ES 197	557568	1972.O12.gz43_247566
M00054750C:D01	ES 197	553457	1972.O18.gz43_247662
M00054750D:F01	ES 197	559215	1972.P01.gz43_247391
M00054750D:H12	ES 197	499517	1972.P03.gz43_247423
M00054751A:A05	ES 197	86145	1972.P04.gz43_247439
M00054751B:F12	ES 197	553702	1972.P14.gz43_247599
M00054751D:G10	ES 197	553800	1972.P24.gz43_247759
M00054752A:C12	ES 197	562451	1981.A03.gz43_247792
M00054752B:H06	ES 197	495942	1981.A10.gz43_247904
M00054753A:A05	ES 197	554000	1981.A18.gz43_248032
M00054753C:H02	ES 197	553918	1981.B08.gz43_247873
M00054753D:A03	ES 197	477046	1981.B09.gz43_247889
M00054753D:C12	ES 197	256179	1981.B11.gz43_247921
M00054753D:H10	ES 197	553922	1981.B13.gz43_247953
M00054754B:F04	ES 197	558609	1981.B16.gz43_248001
M00054754C:H09	ES 197	550580	1981.B22.gz43_248097
M00054754D:F11	ES 197	551693	1981.C04.gz43_247810
M00054755A:E10	ES 197	493135	1981.C10.gz43_247906
M00054755C:D04	ES 197	561412	1981.C24.gz43_248130
M00054755D:E02	ES 197	562360	1981.D02.gz43_247779
M00054755D:E05	ES 197	513632	1981.D03.gz43_247795
M00054756A:C12	ES 197	551289	1981.D09.gz43_247891
M00054756C:C08	ES 197	551288	1981.D15.gz43_247987
M00054756D:F05	ES 197	451993	1981.D19.gz43_248051
M00054757A:H07	ES 197	555343	1981.D21.gz43_248083
M00054757B:H04	ES 197	561433	1981.E04.gz43_247812
M00054758A:F03	ES 197	554336	1981.E13.gz43_247956
M00054758B:C10	ES 197	122169	1981.E15.gz43_247988
M00054758B:D03	ES 197	554352	1981.E16.gz43_248004
M00054758B:H03	ES 197	554049	1981.E18.gz43_248036

Table 13

CloneID	ES No	ClusterID	SequenceName
M00054758D:D03	ES 197	551415	1981.E24.gz43_248132
M00054759A:B08	ES 197	553158	1981.F03.gz43_247797
M00054759C:D07	ES 197	553800	1981.F11.gz43_247925
M00054759C:G10	ES 197	560529	1981.F13.gz43_247957
M00054759D:E01	ES 197	556064	1981.F17.gz43_248021
M00054760A:A12	ES 197	551117	1981.F22.gz43_248101
M00054760A:D10	ES 197	561535	1981.F24.gz43_248133
M00054760B:A10	ES 197	549588	1981.G04.gz43_247814
M00054760D:B03	ES 197	263800	1981.G09.gz43_247894
M00054761C:E02	ES 197	558719	1981.G24.gz43_248134
M00054761D:C11	ES 197	493604	1981.H04.gz43_247815
M00054762A:D09	ES 197	556183	1981.H10.gz43_247911
M00054762B:F02	ES 197	558900	1981.H14.gz43_247975
M00054762B:F07	ES 197	551617	1981.H15.gz43_247991
M00054762C:A12	ES 197	558503	1981.H18.gz43_248039
M00054762D:C06	ES 197	551338	1981.H24.gz43_248135
M00054763A:A10	ES 197	472196	1981.I02.gz43_247784
M00054763C:D07	ES 197	554021	1981.I04.gz43_247816
M00054763C:F10	ES 197	558900	1981.I05.gz43_247832
M00054763C:H04	ES 197	450840	1981.I06.gz43_247848
M00054764A:E11	ES 197	576803	1981.I14.gz43_247976
M00054764C:G04	ES 197	555754	1981.I22.gz43_248104
M00054764D:F01	ES 197	556019	1981.J01.gz43_247769
M00054765B:C03	ES 197	561487	1981.J07.gz43_247865
M00054765B:C11	ES 197	554181	1981.J09.gz43_247897
M00054765C:F10	ES 197	553131	1981.J20.gz43_248073
M00054765D:D05	ES 197	554294	1981.K05.gz43_247834
M00054766A:H10	ES 197	508126	1981.K17.gz43_248026
M00054766C:B08	ES 197	498662	1981.L03.gz43_247803
M00054766C:E01	ES 197	552541	1981.L07.gz43_247867
M00054766D:H02	ES 197	260558	1981.L15.gz43_247995
M00054766D:H12	ES 197	554851	1981.L16.gz43_248011
M00054767A:F08	ES 197	556475	1981.L22.gz43_248107
M00054767C:C08	ES 197	552535	1981.M13.gz43_247964
M00054767C:D03	ES 197	455220	1981.M14.gz43_247980
M00054767C:H06	ES 197	549576	1981.M17.gz43_248028
M00054767D:G09	ES 197	552549	1981.M22.gz43_248108
M00054768B:B05	ES 197	559369	1981.N01.gz43_247773
M00054768B:D10	ES 197	400628	1981.N05.gz43_247837
M00054768D:A01	ES 197	448357	1981.N10.gz43_247917
M00054768D:B11	ES 197	451051	1981.N11.gz43_247933
M00054769A:G10	ES 197	512432	1981.N21.gz43_248093
M00054769B:D12	ES 197	550402	1981.O04.gz43_247822
M00054769B:F03	ES 197	554635	1981.O06.gz43_247854



Table 13

CloneID	ES No	ClusterID	SequenceName
M00054770A:C06	ES 197	558949	1981.O19.gz43_248062
M00054770B:A12	ES 197	552733	1981.O24.gz43_248142
M00054770B:B11	ES 197	556918	1981.P01.gz43_247775
M00054770B:D09	ES 197	448510	1981.P04.gz43_247823
M00054770C:A04	ES 197	528775	1981.P07.gz43_247871
M00054770C:C04	ES 197	554161	1981.P10.gz43_247919
M00054770C:D05	ES 197	555478	1981.P11.gz43_247935
M00054770C:F10	ES 197	554581	1981.P12.gz43_247951
M00054771A:E01	ES 197	470351	1981.P23.gz43_248127
M00054771B:F12	ES 197	492779	1982.A02.gz43_248160
M00054771C:A11	ES 197	551068	1982.A04.gz43_248192
M00054771D:G01	ES 197	551718	1982.A08.gz43_248256
M00054772B:B01	ES 197	586600	1982.A15.gz43_248368
M00054772B:D04	ES 197	472672	1982.A17.gz43_248400
M00054772B:F03	ES 197	493085	1982.A18.gz43_248416
M00054772D:G12	ES 197	553774	1982.B06.gz43_248225
M00054773A:E09	ES 197	551169	1982.B08.gz43_248257
M00054773A:H05	ES 197	402147	1982.B09.gz43_248273
M00054773C:D06	ES 197	42323	1982.B15.gz43_248369
M00054773C:F09	ES 197	557834	1982.B18.gz43_248417
M00054773C:F10	ES 197	448629	1982.B19.gz43_248433
M00054774B:A07	ES 197	555686	1982.C03.gz43_248178
M00054774B:G08	ES 197	554072	1982.C06.gz43_248226
M00054774C:A03	ES 197	552019	1982.C07.gz43_248242
M00054774C:D12	ES 197	552495	1982.C08.gz43_248258
M00054774D:D06	ES 197	559050	1982.C10.gz43_248290
M00054775A:D07	ES 197	555462	1982.C16.gz43_248386
M00054775A:G03	ES 197	595181	1982.C17.gz43_248402
M00054776A:D10	ES 197	557269	1982.D09.gz43_248275
M00054776A:F01	ES 197	560520	1982.D10.gz43_248291
M00054776A:F07	ES 197	447926	1982.D11.gz43_248307
M00054776A:G01	ES 197	412621	1982.D12.gz43_248323
M00054776C:G06	ES 197	554828	1982.E06.gz43_248228
M00054776D:G09	ES 197	553743	1982.E11.gz43_248308
M00054778A:D01	ES 197	555958	1982.F01.gz43_248149
M00054778A:F08	ES 197	551003	1982.F05.gz43_248213
M00054778B:A02	ES 197	551080	1982.F08.gz43_248261
M00054778C:F09	ES 197	548998	1982.F18.gz43_248421
M00054779B:A07	ES 197	465207	1982.G05.gz43_248214
M00054779B:B07	ES 197	559872	1982.G06.gz43_248230
M00054779B:B11	ES 197	556183	1982.G07.gz43_248246
M00054779D:F07	ES 197	554627	1982.G17.gz43_248406
M00054779D:F08	ES 197	551425	1982.G18.gz43_248422
M00054780A:B06	ES 197	550422	1982.G21.gz43_248470

Table 13

CloneID	ES No	ClusterID	SequenceName
M00054780B:B06	ES 197	555524	1982.H03.gz43_248183
M00054780B:E03	ES 197	533991	1982.H05.gz43_248215
M00054780B:G10	ES 197	491570	1982.H06.gz43_248231
M00054780C:G11	ES 197	558519	1982.H14.gz43_248359
M00054781A:H09	ES 197	505792	1982.H21.gz43_248471
M00054781D:F10	ES 197	556171	1982.I02.gz43_248168
M00054782B:B02	ES 197	551167	1982.I05.gz43_248216
M00054782B:D09	ES 197	551425	1982.I07.gz43_248248
M00054782D:D12	ES 197	575924	1982.I10.gz43_248296
M00054783C:C02	ES 197	557039	1982.I16.gz43_248392
M00054783C:C03	ES 197	552325	1982.I17.gz43_248408
M00054784C:D11	ES 197	552535	1982.J07.gz43_248249
M00054784D:B01	ES 197	554582	1982.J10.gz43_248297
M00054785B:B07	ES 197	552188	1982.J13.gz43_248345
M00054785C:C02	ES 197	562263	1982.J15.gz43_248377
M00054785C:G11	ES 197	462511	1982.J17.gz43_248409
M00054785D:A07	ES 197	552005	1982.J19.gz43_248441
M00054786A:G11	ES 198	561422	1982.J21.gz43_248473
M00054786C:G01	ES 198	553330	1982.K02.gz43_248170
M00054786D:F08	ES 198	553868	1982.K05.gz43_248218
M00054787D:A10	ES 198	580179	1982.K12.gz43_248330
M00054788C:G04	ES 198	552813	1982.K17.gz43_248410
M00054789A:A02	ES 198	490414	1982.K18.gz43_248426
M00054790D:D05	ES 198	548874	1982.L06.gz43_248235
M00054801C:G01	ES 198	549233	1982.L17.gz43_248411
M00054802A:G03	ES 198	446394	1982.M01.gz43_248156
M00054802A:H05	ES 198	490507	1982.M03.gz43_248188
M00054802C:A07	ES 198	374282	1982.M06.gz43_248236
M00054802D:A09	ES 198	555696	1982.M10.gz43_248300
M00054802D:C02	ES 198	497477	1982.M12.gz43_248332
M00054802D:C03	ES 198	456052	1982.M13.gz43_248348
M00054803A:D08	ES 198	175758	1982.M17.gz43_248412
M00054803A:E10	ES 198	551553	1982.M18.gz43_248428
M00054803B:B12	ES 198	554116	1982.M20.gz43_248460
M00054803C:G01	ES 198	551755	1982.M24.gz43_248524
M00054804A:G08	ES 198	496570	1982.N08.gz43_248269
M00054804A:H04	ES 198	539353	1982.N09.gz43_248285
M00054804B:E07	ES 198	553979	1982.N11.gz43_248317
M00054804C:F04	ES 198	553237	1982.N14.gz43_248365
M00054804D:A11	ES 198	559896	1982.N16.gz43_248397
M00054804D:D07	ES 198	555571	1982.N18.gz43_248429
M00054804D:H12	ES 198	417259	1982.N22.gz43_248493
M00054805A:E09	ES 198	553612	1982.O03.gz43_248190

Table 13

CloneID	ES No	ClusterID	SequenceName
M00054805A:H04	ES 198	552183	1982.O04.gz43_248206
M00054805B:E06	ES 198	556856	1982.O10.gz43_248302
M00054805B:E11	ES 198	497912	1982.O11.gz43_248318
M00054805B:G02	ES 198	556856	1982.O14.gz43_248366
M00054805B:G10	ES 198	394168	1982.O16.gz43_248398
M00054806A:G04	ES 198	553848	1982.P02.gz43_248175
M00054806C:C12	ES 198	517146	1982.P08.gz43_248271
M00054806D:C01	ES 198	553331	1982.P10.gz43_248303
M00054811A:C10	ES 198	551512	1983.C10.gz43_255077
M00054811B:H12	ES 198	494471	1983.C19.gz43_255221
M00054811D:F01	ES 198	551659	1983.D01.gz43_254934
M00054812D:H05	ES 198	549816	1983.E06.gz43_255015
M00054813B:D11	ES 198	456520	1983.E19.gz43_255223
M00054814A:F07	ES 198	557525	1983.F09.gz43_255064
M00054823B:E07	ES 198	450788	1983.K11.gz43_255101
M00054824A:E02	ES 198	555641	1983.L07.gz43_255038
M00054826B:G08	ES 198	447087	1983.N07.gz43_255040
M00054831A:E11	ES 198	554196	1984.A12.gz43_255491
M00054831B:E05	ES 198	451081	1984.A20.gz43_255619
M00054839D:F08	ES 198	562302	1984.G07.gz43_255417
M00054840D:B03	ES 198	557703	1984.G21.gz43_255641
M00054842B:B12	ES 198	554696	1984.I08.gz43_255435
M00054848B:E02	ES 198	533520	1984.N02.gz43_255344
M00054851B:E03	ES 198	560984	1984.P06.gz43_255410
M00054852C:G03	ES 198	559885	1993.A04.gz43_263822
M00054852D:D09	ES 198	556715	1993.A09.gz43_263902
M00054853A:A10	ES 198	556132	1993.A11.gz43_263934
M00054853B:E07	ES 198	522703	1993.A18.gz43_264046
M00054853B:E10	ES 198	599433	1993.A19.gz43_264062
M00054854A:H06	ES 198	554524	1993.B05.gz43_263839
M00054854B:C04	ES 198	548861	1993.B07.gz43_263871
M00054854C:H02	ES 198	450829	1993.B12.gz43_263951
M00054855B:E04	ES 198	554672	1993.C05.gz43_263840
M00054855B:F10	ES 198	556918	1993.C07.gz43_263872
M00054855C:B06	ES 198	496897	1993.C09.gz43_263904
M00054855C:H08	ES 198	557209	1993.C13.gz43_263968
M00054855D:G12	ES 198	557077	1993.C14.gz43_263984
M00054856A:F08	ES 198	554613	1993.C20.gz43_264080
M00054856D:E11	ES 198	560714	1993.D05.gz43_263841
M00054857A:B11	ES 198	554084	1993.D09.gz43_263905
M00054857A:G09	ES 198	554756	1993.D14.gz43_263985
M00054857A:G12	ES 198	554989	1993.D15.gz43_264001
M00054857B:D08	ES 198	593343	1993.D19.gz43_264065
M00054857C:G09	ES 198	555740	1993.E02.gz43_263794

Table 13

CloneID	ES No	ClusterID	SequenceName
M00054857D:E12	ES 198	554500	1993.E07.gz43_263874
M00054858A:B05	ES 198	554497	1993.E10.gz43_263922
M00054858A:D06	ES 198	482306	1993.E14.gz43_263986
M00054858A:D08	ES 198	550714	1993.E15.gz43_264002
M00054858B:A10	ES 198	451491	1993.E18.gz43_264050
M00054858D:C04	ES 198	551212	1993.F02.gz43_263795
M00054859A:D10	ES 198	555968	1993.F10.gz43_263923
M00054859A:E02	ES 198	555667	1993.F11.gz43_263939
M00054859D:D02	ES 198	557719	1993.F24.gz43_264147
M00054859D:E01	ES 198	594013	1993.G02.gz43_263796
M00054859D:E09	ES 198	554456	1993.G03.gz43_263812
M00054859D:G04	ES 198	557852	1993.G05.gz43_263844
M00054860B:F11	ES 198	549481	1993.G16.gz43_264020
M00054860C:C04	ES 198	554221	1993.G19.gz43_264068
M00054860C:E04	ES 198	497365	1993.G21.gz43_264100
M00054860C:F01	ES 198	490629	1993.G24.gz43_264148
M00054860D:D01	ES 198	554257	1993.H04.gz43_263829
M00054861B:H08	ES 198	560259	1993.H14.gz43_263989
M00054861C:E10	ES 198	551811	1993.H18.gz43_264053
M00054862C:D05	ES 198	522507	1993.I07.gz43_263878
M00054862D:D10	ES 198	476843	1993.I13.gz43_263974
M00054863A:A11	ES 198	562962	1993.I15.gz43_264006
M00054863D:C07	ES 198	463060	1993.I23.gz43_264134
M00054863D:H05	ES 198	554900	1993.J01.gz43_263783
M00054864B:B02	ES 198	553295	1993.J05.gz43_263847
M00054864B:D08	ES 198	501534	1993.J08.gz43_263895
M00054864C:A01	ES 198	519109	1993.J11.gz43_263943
M00054865A:A10	ES 198	462767	1993.J20.gz43_264087
M00054865B:H04	ES 198	43642	1993.K10.gz43_263928
M00054865D:F05	ES 198	394567	1993.K16.gz43_264024
M00054866B:C01	ES 198	560254	1993.L01.gz43_263785
M00054866B:G01	ES 198	408840	1993.L04.gz43_263833
M00054866C:G07	ES 198	595506	1993.L10.gz43_263929
M00054866D:C03	ES 198	402742	1993.L14.gz43_263993
M00054867A:C07	ES 198	549320	1993.L21.gz43_264105
M00054867A:G01	ES 198	551591	1993.L24.gz43_264153
M00054867B:D02	ES 198	493303	1993.M03.gz43_263818
M00054867D:H03	ES 198	463513	1993.M13.gz43_263978
M00054868B:A05	ES 198	557974	1993.M23.gz43_264138
M00054868C:G11	ES 198	559027	1993.N06.gz43_263867
M00054869A:A09	ES 198	552396	1993.N13.gz43_263979
M00054869A:D03	ES 198	457825	1993.N17.gz43_264043
M00054869C:A05	ES 198	182113	1993.O01.gz43_263788
M00054869C:H04	ES 198	549946	1993.O06.gz43_263868

Table 13

CloneID	ES No	ClusterID	SequenceName
M00054869D:F02	ES 198	594434	1993.O10.gz43_263932
M00054870A:D11	ES 198	549666	1993.O13.gz43_263980
M00054870B:A12	ES 198	553072	1993.O17.gz43_264044
M00054870B:G12	ES 198	555553	1993.O21.gz43_264108
M00054870C:C05	ES 198	522648	1993.P03.gz43_263821
M00054870C:E06	ES 198	556382	1993.P04.gz43_263837
M00054870D:G08	ES 198	555702	1993.P10.gz43_263933
M00054871A:C04	ES 198	390017	1993.P14.gz43_263997
M00054871A:E03	ES 198	553582	1993.P15.gz43_264013
M00054871A:E07	ES 198	524464	1993.P18.gz43_264061
M00054871A:H07	ES 198	481641	1993.P21.gz43_264109
M00054871B:E10	ES 198	553586	1993.P24.gz43_264157
M00054871B:F06	ES 198	556839	1994.A02.gz43_255715
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M00054873C:E09	ES 198	553636	1994.B17.gz43_255956
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M00054878B:G03	ES 198	447483	1994.F22.gz43_256040
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M00054891D:D03	ES 198	556722	1995.A01.gz43_256083
M00054891D:H05	ES 198	557218	1995.A03.gz43_256115
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M00054892D:D06	ES 198	454812	1995.A19.gz43_256371
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M00054893C:G06	ES 198	474163	1995.B22.gz43_256420
M00054893D:D12	ES 198	556632	1995.B24.gz43_256452
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M00054894C:B11	ES 198	556404	1995.C12.gz43_256261
M00054894D:F04	ES 198	446186	1995.C15.gz43_256309
M00054895B:A02	ES 198	558779	1995.C23.gz43_256437
M00054895B:A08	ES 198	596809	1995.C24.gz43_256453
M00054895B:D09	ES 198	447858	1995.D05.gz43_256150
M00054895C:B07	ES 198	82864	1995.D11.gz43_256246
M00054895D:B02	ES 198	549228	1995.D16.gz43_256326
M00054895D:C10	ES 198	552122	1995.D18.gz43_256358
M00054896B:E09	ES 198	562672	1995.E04.gz43_256135
M00054896C:D08	ES 198	556725	1995.E09.gz43_256215
M00054896C:F01	ES 198	451049	1995.E10.gz43_256231

Table 13

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M00054896D:C01	ES 198	556499	1995.E13.gz43_256279
M00054896D:C11	ES 198	557326	1995.E14.gz43_256295
M00054896D:E11	ES 198	557283	1995.E16.gz43_256327
M00054897C:F03	ES 198	562679	1995.F03.gz43_256120
M00054897D:E08	ES 198	556804	1995.F07.gz43_256184
M00054898A:G09	ES 198	453715	1995.F13.gz43_256280
M00054898B:A03	ES 198	556328	1995.F16.gz43_256328
M00054898B:D01	ES 198	549997	1995.F20.gz43_256392
M00054898B:D04	ES 198	458035	1995.F21.gz43_256408
M00054898D:H12	ES 198	543855	1995.G03.gz43_256121
M00054899A:D09	ES 198	460690	1995.G05.gz43_256153
M00054899C:D11	ES 198	553534	1995.G16.gz43_256329
M00054899D:C11	ES 198	558011	1995.G20.gz43_256393
M00054899D:F07	ES 198	555830	1995.G23.gz43_256441
M00054899D:G01	ES 198	561382	1995.H01.gz43_256090
M00054900B:A09	ES 198	556362	1995.H05.gz43_256154
M00054900B:D08	ES 198	525429	1995.H07.gz43_256186
M00054900B:D12	ES 198	559554	1995.H08.gz43_256202
M00054900B:G10	ES 198	560668	1995.H10.gz43_256234
M00054900C:B04	ES 198	559554	1995.H11.gz43_256250
M00054900C:C03	ES 198	516691	1995.H12.gz43_256266
M00054900C:D08	ES 198	556753	1995.H13.gz43_256282
M00054900D:F11	ES 198	557004	1995.H16.gz43_256330
M00054900D:G04	ES 198	561115	1995.H17.gz43_256346
M00054901A:B04	ES 198	559088	1995.H20.gz43_256394
M00054901A:F01	ES 198	555837	1995.H21.gz43_256410
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M00054903D:B05	ES 199	555184	1995.J15.gz43_256316
M00054903D:G01	ES 199	558177	1995.J19.gz43_256380
M00054903D:G10	ES 199	555967	1995.J21.gz43_256412
M00054904A:F07	ES 199	554604	1995.K02.gz43_256109
M00054904A:H10	ES 199	549376	1995.K03.gz43_256125

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M00054904C:G09	ES 199	549822	1995.K13.gz43_256285
M00054904D:B01	ES 199	559036	1995.K14.gz43_256301
M00054904D:F07	ES 199	411272	1995.K18.gz43_256365
M00054904D:G04	ES 199	558868	1995.K20.gz43_256397
M00054906D:D06	ES 199	492256	1995.L05.gz43_256158
M00054907A:D01	ES 199	554344	1995.L08.gz43_256206
M00054907B:E07	ES 199	489001	1995.L13.gz43_256286
M00054907B:F01	ES 199	399766	1995.L14.gz43_256302
M00054907C:A12	ES 199	553969	1995.L16.gz43_256334
M00054907C:D03	ES 199	554246	1995.L18.gz43_256366
M00054907D:D01	ES 199	554244	1995.L22.gz43_256430
M00054908A:F10	ES 199	522220	1995.M03.gz43_256127
M00054908C:A10	ES 199	555082	1995.M17.gz43_256351
M00054908D:A07	ES 199	558326	1995.N02.gz43_256112
M00054910A:H12	ES 199	562492	1995.N08.gz43_256208
M00054910B:F07	ES 199	561525	1995.N09.gz43_256224
M00054910D:F04	ES 199	555786	1995.N13.gz43_256288
M00054921C:G01	ES 199	554747	1995.N23.gz43_256448
M00054921C:G06	ES 199	495365	1995.N24.gz43_256464
M00054922A:C11	ES 199	550710	1995.O03.gz43_256129
M00054922B:A08	ES 199	553975	1995.O08.gz43_256209
M00054922B:A10	ES 199	150839	1995.O09.gz43_256225
M00054922B:F03	ES 199	554554	1995.O10.gz43_256241
M00054922C:A11	ES 199	553976	1995.O14.gz43_256305
M00054922D:A07	ES 199	471152	1995.O18.gz43_256369
M00054923A:H02	ES 199	447639	1995.O24.gz43_256465
M00054923D:A08	ES 199	562579	1995.P06.gz43_256178
M00054923D:D04	ES 199	559118	1995.P07.gz43_256194
M00054924B:E10	ES 199	562989	1995.P13.gz43_256290
M00054924B:F02	ES 199	448793	1995.P14.gz43_256306
M00054924B:F07	ES 199	553691	1995.P15.gz43_256322
M00054924D:E01	ES 199	562714	1995.P17.gz43_256354
M00054925A:B08	ES 199	556852	1995.P19.gz43_256386
M00054925B:B01	ES 199	559728	1996.A04.gz43_256539
M00054927C:C03	ES 199	473512	1996.B13.gz43_256684
M00054928A:C11	ES 199	550782	1996.B20.gz43_256796
M00054930D:D04	ES 199	558024	1996.D13.gz43_256686
M00054931C:F10	ES 199	549171	1996.E06.gz43_256575
M00054933A:H09	ES 199	44608	1996.F18.gz43_256768
M00054933B:C02	ES 199	562106	1996.F20.gz43_256800
M00054936B:G02	ES 199	555739	1996.I18.gz43_256771
M00054936C:B08	ES 199	549805	1996.I19.gz43_256787

Table 13

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M00054939A:B11	ES 199	560088	1996.L08.gz43_256614
M00054939D:E03	ES 199	552566	1996.M08.gz43_256615
M00054940C:H12	ES 199	227777	1996.N13.gz43_256696
M00054940D:E06	ES 199	553535	1996.N16.gz43_256744
M00054941A:A08	ES 199	558397	1996.N18.gz43_256776
M00054941C:G04	ES 199	562550	1996.O06.gz43_256585
M00054942A:G01	ES 199	549622	1996.O20.gz43_256809
M00054942C:B04	ES 199	67060	1996.P05.gz43_256570
M00054943A:H11	ES 199	481166	1996.P20.gz43_256810
M00054943D:F12	ES 199	562053	2005.A14.gz43_257085
M00054945B:G09	ES 199	554833	2005.C07.gz43_256975
M00054949C:H07	ES 199	430194	2005.F21.gz43_257202
M00054951A:G03	ES 199	555996	2005.H14.gz43_257092
M00054952A:B12	ES 199	496870	2005.I10.gz43_257029
M00054952D:A11	ES 199	555018	2005.J08.gz43_256998
M00054953B:D07	ES 199	555526	2005.J12.gz43_257062
M00054954A:F12	ES 199	561878	2005.K03.gz43_256919
M00054959A:A08	ES 199	556355	2005.O05.gz43_256955
M00054960C:C03	ES 199	456795	2006.A03.gz43_257293
M00054961A:E10	ES 199	550149	2006.A11.gz43_257421
M00054961B:D07	ES 199	556740	2006.A17.gz43_257517
M00054961B:G06	ES 199	562990	2006.A22.gz43_257597
M00054961C:H07	ES 199	450524	2006.B02.gz43_257278
M00054961D:A10	ES 199	556273	2006.B03.gz43_257294
M00054961D:H08	ES 199	557421	2006.B09.gz43_257390
M00054962A:H07	ES 199	129715	2006.B22.gz43_257598
M00054962B:A07	ES 199	555135	2006.B23.gz43_257614
M00054962C:D02	ES 199	599012	2006.C06.gz43_257343
M00054963A:C12	ES 199	531145	2006.C17.gz43_257519
M00054963A:E02	ES 199	560696	2006.C20.gz43_257567
M00054963A:G12	ES 199	553976	2006.C22.gz43_257599
M00054963A:H04	ES 199	471257	2006.C23.gz43_257615
M00054963B:H01	ES 199	449537	2006.D05.gz43_257328
M00054963C:C08	ES 199	555394	2006.D06.gz43_257344
M00054963C:H06	ES 199	559373	2006.D11.gz43_257424
M00054964A:B09	ES 199	561984	2006.D22.gz43_257600
M00054964A:C06	ES 199	562386	2006.D23.gz43_257616
M00054964A:F09	ES 199	556954	2006.E03.gz43_257297
M00054964C:B07	ES 199	553204	2006.E10.gz43_257409
M00054965C:C04	ES 199	557883	2006.F18.gz43_257538
M00054966A:C02	ES 199	465339	2006.G01.gz43_257267



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M00054966A:D09	ES 199	593173	2006.G06.gz43_257347
M00054966A:G02	ES 199	556126	2006.G10.gz43_257411
M00054966D:C05	ES 199	497938	2006.G22.gz43_257603
M00054966D:H12	ES 199	494306	2006.H03.gz43_257300
M00054967A:D11	ES 199	456203	2006.H05.gz43_257332
M00054967D:F08	ES 199	208278	2006.I03.gz43_257301
M00054968A:C11	ES 199	592941	2006.I06.gz43_257349
M00054969A:B08	ES 199	436888	2006.J05.gz43_257334
M00054969A:E05	ES 199	556123	2006.J08.gz43_257382
M00054969A:F12	ES 199	554646	2006.J11.gz43_257430
M00054969B:F12	ES 199	556552	2006.J19.gz43_257558
M00054969C:G09	ES 199	556951	2006.J22.gz43_257606
M00054969C:H05	ES 199	557080	2006.J23.gz43_257622
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M00054969D:G11	ES 199	450932	2006.K09.gz43_257399
M00054970A:G03	ES 199	470386	2006.K18.gz43_257543
M00054970B:B02	ES 199	218113	2006.K20.gz43_257575
M00054970C:C08	ES 199	504400	2006.L03.gz43_257304
M00054971A:D04	ES 199	557559	2006.L20.gz43_257576
M00054971A:D07	ES 199	554275	2006.L22.gz43_257608
M00054971C:C11	ES 199	554204	2006.M11.gz43_257433
M00054971C:H06	ES 199	596152	2006.M18.gz43_257545
M00054971D:F04	ES 199	554643	2006.M23.gz43_257625
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M00054973B:A10	ES 199	555103	2006.O06.gz43_257355
M00054973D:B09	ES 199	555155	2006.O16.gz43_257515
M00054974C:A04	ES 199	557780	2006.P02.gz43_257292
M00054974D:C11	ES 199	556552	2006.P11.gz43_257436
M00054975A:C08	ES 199	559047	2006.P12.gz43_257452
M00054975A:E02	ES 199	552941	2006.P13.gz43_257468
M00054975B:B06	ES 199	554365	2006.P15.gz43_257500
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M00054975C:G06	ES 199	482509	2007.A03.gz43_257677
M00054976A:A03	ES 199	551967	2007.A05.gz43_257709
M00054976B:C10	ES 199	556512	2007.A08.gz43_257757
M00054976C:A03	ES 199	558670	2007.A11.gz43_257805
M00054976C:G10	ES 199	476517	2007.A19.gz43_257933
M00054976D:F06	ES 199	523332	2007.A24.gz43_258013
M00054977C:A09	ES 199	458257	2007.B13.gz43_257838

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M00054977C:D12	ES 199	556690	2007.B16.gz43_257886
M00054977C:F09	ES 199	561112	2007.B18.gz43_257918
M00054977D:B06	ES 199	551694	2007.B20.gz43_257950
M00054978C:E07	ES 199	556768	2007.C04.gz43_257695
M00054978D:H09	ES 199	562750	2007.C09.gz43_257775
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M00054979B:G12	ES 199	557054	2007.C18.gz43_257919
M00054980C:C07	ES 199	556603	2007.D09.gz43_257776
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M00054980D:H07	ES 199	555197	2007.D13.gz43_257840
M00054981B:B09	ES 199	483410	2007.D18.gz43_257920
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M00054981C:A11	ES 199	481243	2007.D24.gz43_258016
M00054981D:C03	ES 199	549822	2007.E06.gz43_257729
M00054981D:C06	ES 199	556561	2007.E08.gz43_257761
M00054982C:A02	ES 199	552437	2007.E15.gz43_257873
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M00054983C:F05	ES 199	170450	2007.F04.gz43_257698
M00054983C:G09	ES 199	554123	2007.F05.gz43_257714
M00054983D:D05	ES 199	560652	2007.F09.gz43_257778
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M00054985A:D09	ES 199	555594	2007.G10.gz43_257795
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M00054988C:G02	ES 199	557039	2007.I19.gz43_257941
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M00054991B:E11	ES 200	556841	2007.K03.gz43_257687
M00054991C:E01	ES 200	454463	2007.K08.gz43_257767
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M00054993C:C10	ES 200	552055	2007.L17.gz43_257912
M00054993C:D12	ES 200	559372	2007.L20.gz43_257960
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M00054993C:H05	ES 200	562323	2007.L23.gz43_258008
M00054993D:F04	ES 200	557420	2007.M02.gz43_257673
M00054994A:E05	ES 200	550833	2007.M06.gz43_257737
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M00054994C:A01	ES 200	476398	2007.M13.gz43_257849
M00054994C:B12	ES 200	553252	2007.M14.gz43_257865
M00054994C:G06	ES 200	553797	2007.M16.gz43_257897
M00054995B:G12	ES 200	554764	2007.N06.gz43_257738
M00054995D:D10	ES 200	551150	2007.N13.gz43_257850
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M00054996A:D10	ES 200	549214	2007.N20.gz43_257962
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M00054997A:C02	ES 200	554212	2007.O12.gz43_257835
M00054997A:G11	ES 200	476732	2007.O15.gz43_257883
M00054997B:F10	ES 200	559096	2007.O18.gz43_257931
M00054997C:H03	ES 200	560984	2007.O24.gz43_258027
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M00055000A:H10	ES 200	553915	2007.P11.gz43_257820
M00055000B:B04	ES 200	555883	2007.P12.gz43_257836
M00055000B:F02	ES 200	553732	2007.P13.gz43_257852
M00055000C:F08	ES 200	549516	2007.P17.gz43_257916
M00055000D:C03	ES 200	557531	2007.P19.gz43_257948
M00055001A:A02	ES 200	591128	2007.P24.gz43_258028
M00055001A:B10	ES 200	553064	2008.A02.gz43_258047

Table 13

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M00055001A:G05	ES 200	554693	2008.A09.gz43_258159
M00055001B:H05	ES 200	552613	2008.A14.gz43_258239
M00055001C:A11	ES 200	553967	2008.A15.gz43_258255
M00055001C:C10	ES 200	335714	2008.A17.gz43_258287
M00055001C:G07	ES 200	549690	2008.A18.gz43_258303
M00055002B:E07	ES 200	549912	2008.B03.gz43_258064
M00055002B:G03	ES 200	556042	2008.B05.gz43_258096
M00055002D:A07	ES 200	554379	2008.B11.gz43_258192
M00055002D:E04	ES 200	562550	2008.B12.gz43_258208
M00055003A:D05	ES 200	553191	2008.B15.gz43_258256
M00055003A:D11	ES 200	437580	2008.B16.gz43_258272
M00055003A:G04	ES 200	555949	2008.B18.gz43_258304
M00055003A:H01	ES 200	601219	2008.B19.gz43_258320
M00055003B:E07	ES 200	555639	2008.B21.gz43_258352
M00055003B:G11	ES 200	558744	2008.B23.gz43_258384
M00055003C:E08	ES 200	559011	2008.C04.gz43_258081
M00055003D:F09	ES 200	134237	2008.C09.gz43_258161
M00055004B:C12	ES 200	557326	2008.C16.gz43_258273
M00055005A:C07	ES 200	552006	2008.D02.gz43_258050
M00055005A:E02	ES 200	555701	2008.D04.gz43_258082
M00055005C:G04	ES 200	556616	2008.D16.gz43_258274
M00055005D:B08	ES 200	460445	2008.D17.gz43_258290
M00055005D:C11	ES 200	555289	2008.D18.gz43_258306
M00055005D:G04	ES 200	553523	2008.D22.gz43_258370
M00055006A:D01	ES 200	559676	2008.E02.gz43_258051
M00055006B:A09	ES 200	558212	2008.E05.gz43_258099
M00055006B:C08	ES 200	552674	2008.E07.gz43_258131
M00055006B:E05	ES 200	347057	2008.E10.gz43_258179
M00055006B:G03	ES 200	557026	2008.E11.gz43_258195
M00055007C:D01	ES 200	34381	2008.F08.gz43_258148
M00055007D:D11	ES 200	480960	2008.F13.gz43_258228
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M00055008B:F03	ES 200	522762	2008.F19.gz43_258324
M00055008B:F04	ES 200	558530	2008.F20.gz43_258340
M00055008C:F09	ES 200	551444	2008.G03.gz43_258069
M00055008C:H10	ES 200	554932	2008.G05.gz43_258101
M00055008D:A02	ES 200	554015	2008.G06.gz43_258117
M00055008D:E02	ES 200	556041	2008.G12.gz43_258213
M00055008D:F05	ES 200	560563	2008.G13.gz43_258229
M00055008D:F12	ES 200	449314	2008.G14.gz43_258245
M00055008D:H11	ES 200	22308	2008.G18.gz43_258309
M00055009C:A07	ES 200	554040	2008.H02.gz43_258054
M00055009C:F06	ES 200	549195	2008.H08.gz43_258150
M00055009C:F07	ES 200	594994	2008.H09.gz43_258166

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M00055009D:D12	ES 200	558378	2008.H10.gz43_258182
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M00055010A:H05	ES 200	551656	2008.H20.gz43_258342
M00055010B:A06	ES 200	460169	2008.H22.gz43_258374
M00055010B:C11	ES 200	497513	2008.H24.gz43_258406
M00055010C:C10	ES 200	597780	2008.I06.gz43_258119
M00055010D:A02	ES 200	555371	2008.I09.gz43_258167
M00055010D:D08	ES 200	555512	2008.I13.gz43_258231
M00055010D:E08	ES 200	555658	2008.I14.gz43_258247
M00055010D:F11	ES 200	600021	2008.I15.gz43_258263
M00055011A:B11	ES 200	362109	2008.I17.gz43_258295
M00055011A:C06	ES 200	559464	2008.I18.gz43_258311
M00055011A:F06	ES 200	556998	2008.I21.gz43_258359
M00055011A:G07	ES 200	557115	2008.I22.gz43_258375
M00055011A:G12	ES 200	495984	2008.I23.gz43_258391
M00055011B:D08	ES 200	549864	2008.J01.gz43_258040
M00055011B:F09	ES 200	557308	2008.J02.gz43_258056
M00055011C:E04	ES 200	548858	2008.J05.gz43_258104
M00055011D:G03	ES 200	557025	2008.J09.gz43_258168
M00055012B:A10	ES 200	556320	2008.J17.gz43_258296
M00055012B:H12	ES 200	476438	2008.J21.gz43_258360
M00055013B:B07	ES 200	497086	2008.K10.gz43_258185
M00055013B:H01	ES 200	516018	2008.K14.gz43_258249
M00055014B:C12	ES 200	556611	2008.L04.gz43_258090
M00055014B:E08	ES 200	605117	2008.L05.gz43_258106
M00055014C:F05	ES 200	554084	2008.L08.gz43_258154
M00055014C:F11	ES 200	143207	2008.L09.gz43_258170
M00055014D:A11	ES 200	451118	2008.L11.gz43_258202
M00055015A:C08	ES 200	556530	2008.L12.gz43_258218
M00055015A:E04	ES 200	143218	2008.L13.gz43_258234
M00055015B:A04	ES 200	556266	2008.L17.gz43_258298
M00055015B:E09	ES 200	560097	2008.L21.gz43_258362
M00055015D:C09	ES 200	560525	2008.M05.gz43_258107
M00055015D:D06	ES 200	562945	2008.M07.gz43_258139
M00055015D:G05	ES 200	557059	2008.M11.gz43_258203
M00055016A:E04	ES 200	604859	2008.M14.gz43_258251
M00055016B:E02	ES 200	494300	2008.M17.gz43_258299
M00055016C:F11	ES 200	557000	2008.M20.gz43_258347
M00055016C:G04	ES 200	557308	2008.M21.gz43_258363
M00055016D:C07	ES 200	555967	2008.N01.gz43_258044
M00055016D:C11	ES 200	549723	2008.N02.gz43_258060
M00055017A:A11	ES 200	411113	2008.N06.gz43_258124
M00055017C:C12	ES 200	556616	2008.N13.gz43_258236
M00055017C:D05	ES 200	450010	2008.N14.gz43_258252

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M00055017D:D05	ES 200	453908	2008.N17.gz43_258300
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M00055017D:E08	ES 200	554245	2008.N20.gz43_258348
M00055018C:C06	ES 200	495942	2008.O07.gz43_258141
M00055018D:D01	ES 200	604179	2008.O11.gz43_258205
M00055018D:E05	ES 200	524897	2008.O12.gz43_258221
M00055018D:H03	ES 200	551268	2008.O16.gz43_258285
M00055019B:B11	ES 200	556488	2008.P01.gz43_258046
M00055019B:H10	ES 200	557240	2008.P03.gz43_258078
M00055019C:C01	ES 200	556115	2008.P04.gz43_258094
M00055019C:G06	ES 200	557121	2008.P08.gz43_258158
M00055019D:B02	ES 200	556487	2008.P11.gz43_258206
M00055019D:B11	ES 200	556490	2008.P12.gz43_258222
M00055020A:G11	ES 200	562142	2008.P20.gz43_258350
M00055020B:C12	ES 200	608873	2017.A02.gz43_258433
M00055020D:G06	ES 200	557910	2017.B02.gz43_258434
M00055021A:F08	ES 200	610986	2017.B05.gz43_258482
M00055021B:G09	ES 200	450059	2017.B14.gz43_258626
M00055021D:F06	ES 200	549114	2017.B22.gz43_258754
M00055022B:F07	ES 200	557759	2017.C09.gz43_258547
M00055022C:B12	ES 200	557353	2017.C14.gz43_258627
M00055023C:G11	ES 200	561935	2017.D08.gz43_258532
M00055023D:G02	ES 200	557049	2017.D10.gz43_258564
M00055024A:B04	ES 200	481930	2017.D11.gz43_258580
M00055024A:C07	ES 200	560898	2017.D14.gz43_258628
M00055024B:E02	ES 200	508671	2017.D18.gz43_258692
M00055024B:E03	ES 200	561868	2017.D19.gz43_258708
M00055024B:E06	ES 200	529356	2017.D21.gz43_258740
M00055024B:F02	ES 200	556933	2017.D22.gz43_258756
M00055024D:E09	ES 200	551884	2017.E05.gz43_258485
M00055024D:F07	ES 200	559447	2017.E06.gz43_258501
M00055024D:G09	ES 200	550815	2017.E07.gz43_258517
M00055025A:D11	ES 200	560250	2017.E10.gz43_258565
M00055025B:A03	ES 200	550986	2017.E11.gz43_258581
M00055026A:G08	ES 200	322123	2017.F06.gz43_258502
M00055026C:E07	ES 200	552891	2017.F16.gz43_258662
M00055026D:E12	ES 200	556856	2017.F19.gz43_258710
M00055027A:D03	ES 200	447438	2017.F21.gz43_258742
M00055027A:E04	ES 200	494314	2017.F22.gz43_258758
M00055027A:H02	ES 200	557975	2017.G01.gz43_258423
M00055027C:G06	ES 200	524100	2017.G09.gz43_258551
M00055027D:E08	ES 200	454483	2017.G16.gz43_258663
M00055028C:D05	ES 200	390017	2017.H04.gz43_258472
M00055028D:A08	ES 200	556258	2017.H06.gz43_258504

Table 13

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M00055029A:A02	ES 200	560621	2017.H11.gz43_258584
M00055029C:D05	ES 200	557603	2017.I02.gz43_258441
M00055030B:E03	ES 200	549599	2017.I11.gz43_258585
M00055030B:H07	ES 200	461850	2017.I14.gz43_258633
M00055031B:E02	ES 200	561301	2017.J06.gz43_258506
M00055031B:E05	ES 200	557733	2017.J08.gz43_258538
M00055031B:H08	ES 200	558004	2017.J11.gz43_258586
M00055031C:B11	ES 200	552848	2017.J14.gz43_258634
M00055032B:D08	ES 200	561279	2017.K06.gz43_258507
M00055032D:B06	ES 200	454014	2017.K16.gz43_258667
M00055033B:H01	ES 200	562590	2017.L12.gz43_258604
M00055033C:A08	ES 200	557283	2017.L13.gz43_258620
M00055033D:D03	ES 200	557010	2017.L19.gz43_258716
M00055033D:G01	ES 200	557883	2017.L21.gz43_258748
M00055034A:G01	ES 200	460078	2017.L23.gz43_258780
M00055034B:G04	ES 200	523495	2017.M03.gz43_258461
M00055034D:A10	ES 200	556458	2017.M13.gz43_258621
M00055035B:D11	ES 200	408586	2017.M22.gz43_258765
M00055035C:G10	ES 200	555651	2017.N07.gz43_258526
M00055035D:E07	ES 200	556852	2017.N09.gz43_258558
M00055035D:F09	ES 200	558755	2017.N12.gz43_258606
M00055036A:H10	ES 200	456183	2017.N18.gz43_258702
M00055036B:H02	ES 201	561836	2017.N23.gz43_258782
M00055036C:G10	ES 201	491127	2017.O02.gz43_258447
M00055037C:D01	ES 201	557578	2017.O18.gz43_258703
M00055038A:H08	ES 201	134734	2017.P07.gz43_258528
M00055039A:G06	ES 201	561438	2018.A03.gz43_264190
M00055039B:E02	ES 201	555660	2018.A07.gz43_264254
M00055039B:G11	ES 201	555993	2018.A08.gz43_264270
M00055039B:G11	ES 201	555993	2018.A08.gz43_264654
M00055039B:H10	ES 201	601365	2018.A09.gz43_264286
M00055039C:B05	ES 201	529733	2018.A11.gz43_264318
M00055039C:D11	ES 201	397338	2018.A12.gz43_264718
M00055039D:D07	ES 201	561259	2018.A15.gz43_264382
M00055039D:D07	ES 201	561259	2018.A15.gz43_264766
M00055040A:C02	ES 201	555399	2018.A17.gz43_264414
M00055040A:C02	ES 201	555399	2018.A17.gz43_264798
M00055040A:F01	ES 201	555883	2018.A18.gz43_264430
M00055040B:F02	ES 201	555751	2018.A22.gz43_264878
M00055040C:G08	ES 201	447815	2018.A23.gz43_264510
M00055040D:B05	ES 201	555160	2018.A24.gz43_264910
M00055040D:G05	ES 201	561761	2018.B02.gz43_264175

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M00055041A:C02	ES 201	555340	2018.B05.gz43_264223
M00055041B:B06	ES 201	417274	2018.B08.gz43_264655
M00055041B:C10	ES 201	551711	2018.B09.gz43_264671
M00055041B:D11	ES 201	555524	2018.B10.gz43_264303
M00055041B:D11	ES 201	555524	2018.B10.gz43_264687
M00055041B:F04	ES 201	561994	2018.B13.gz43_264735
M00055041C:C10	ES 201	554149	2018.B17.gz43_264799
M00055041C:H12	ES 201	470617	2018.B22.gz43_264495
M00055041D:B07	ES 201	555250	2018.B23.gz43_264895
M00055042A:D09	ES 201	561901	2018.C07.gz43_264256
M00055042A:F07	ES 201	551328	2018.C08.gz43_264656
M00055042B:B09	ES 201	549008	2018.C10.gz43_264304
M00055042B:E02	ES 201	555708	2018.C12.gz43_264336
M00055042B:E05	ES 201	448098	2018.C13.gz43_264736
M00055042B:E08	ES 201	450765	2018.C14.gz43_264368
M00055042B:E08	ES 201	450765	2018.C14.gz43_264752
M00055042C:B05	ES 201	555172	2018.C16.gz43_264400
M00055042C:F04	ES 201	551805	2018.C19.gz43_264832
M00055042D:G03	ES 201	555940	2018.C21.gz43_264864
M00055042D:H02	ES 201	423588	2018.C22.gz43_264880
M00055043A:B06	ES 201	555173	2018.C24.gz43_264912
M00055043B:B01	ES 201	555213	2018.D07.gz43_264641
M00055043B:G01	ES 201	551714	2018.D08.gz43_264273
M00055043D:D10	ES 201	558254	2018.D13.gz43_264737
M00055043D:F07	ES 201	553356	2018.D14.gz43_264753
M00055044A:A08	ES 201	562949	2018.D17.gz43_264417
M00055044A:C02	ES 201	450755	2018.D18.gz43_264817
M00055044B:F12	ES 201	549444	2018.D21.gz43_264865
M00055045A:C06	ES 201	561911	2018.E08.gz43_264658
M00055045A:F03	ES 201	555771	2018.E10.gz43_264306
M00055045A:F12	ES 201	553850	2018.E11.gz43_264322
M00055045B:A04	ES 201	559699	2018.E12.gz43_264338
M00055045B:A04	ES 201	559699	2018.E12.gz43_264722
M00055045B:A12	ES 201	347486	2018.E13.gz43_264738
M00055045B:C08	ES 201	560720	2018.E14.gz43_264370
M00055045B:C08	ES 201	560720	2018.E14.gz43_264754
M00055045C:F09	ES 201	555892	2018.E18.gz43_264818
M00055045C:H05	ES 201	556158	2018.E19.gz43_264450
M00055045D:A01	ES 201	108755	2018.E21.gz43_264482
M00055045D:A07	ES 201	551578	2018.E22.gz43_264882
M00055045D:D01	ES 201	446664	2018.E24.gz43_264914
M00055045D:F10	ES 201	561838	2018.F02.gz43_264179
M00055046A:D06	ES 201	562585	2018.F05.gz43_264227
M00055046B:C07	ES 201	375380	2018.F09.gz43_264291



Table 13

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M00055046B:E08	ES 201	557420	2018.F13.gz43_264739
M00055046B:F06	ES 201	491799	2018.F14.gz43_264755
M00055046C:C05	ES 201	558389	2018.F18.gz43_264435
M00055046C:E07	ES 201	488970	2018.F21.gz43_264867
M00055046C:E11	ES 201	514418	2018.F23.gz43_264515
M00055046C:G10	ES 201	551641	2018.F24.gz43_264915
M00055047A:E07	ES 201	557735	2018.G11.gz43_264324
M00055047A:H04	ES 201	558007	2018.G13.gz43_264740
M00055047A:H05	ES 201	558120	2018.G14.gz43_264372
M00055047A:H05	ES 201	558120	2018.G14.gz43_264756
M00055047B:A10	ES 201	557326	2018.G15.gz43_264388
M00055047B:B03	ES 201	289316	2018.G16.gz43_264404
M00055047B:B10	ES 201	553603	2018.G17.gz43_264804
M00055047B:C03	ES 201	551793	2018.G18.gz43_264820
M00055047B:G06	ES 201	556171	2018.G22.gz43_264884
M00055047B:G10	ES 201	476268	2018.G23.gz43_264900
M00055047C:D11	ES 201	447455	2018.H06.gz43_264245
M00055047C:F07	ES 201	554936	2018.H07.gz43_264261
M00055047C:F08	ES 201	465207	2018.H08.gz43_264277
M00055047C:F08	ES 201	465207	2018.H08.gz43_264661
M00055047D:C12	ES 201	555798	2018.H11.gz43_264325
M00055048A:A04	ES 201	557279	2018.H16.gz43_264405
M00055048A:B12	ES 201	465447	2018.H17.gz43_264421
M00055048A:D12	ES 201	557606	2018.H19.gz43_264453
M00055048A:F04	ES 201	453893	2018.H20.gz43_264469
M00055048C:C06	ES 201	556490	2018.I04.gz43_264214
M00055048D:D08	ES 201	419153	2018.I08.gz43_264278
M00055048D:D08	ES 201	419153	2018.I08.gz43_264662
M00055048D:H04	ES 201	349744	2018.I14.gz43_264374
M00055049A:F10	ES 201	559762	2018.I19.gz43_264838
M00055049A:G03	ES 201	561046	2018.I20.gz43_264854
M00055049B:A01	ES 201	557249	2018.I22.gz43_264502
M00055049B:F05	ES 201	553983	2018.J01.gz43_264167
M00055049C:H12	ES 201	555010	2018.J07.gz43_264263
M00055049C:H12	ES 201	555010	2018.J07.gz43_264647
M00055049D:D09	ES 201	561216	2018.J09.gz43_264295
M00055049D:D10	ES 201	446739	2018.J10.gz43_264695
M00055050A:D11	ES 201	449437	2018.J15.gz43_264391
M00055050A:H08	ES 201	556169	2018.J16.gz43_264407
M00055050B:E11	ES 201	206098	2018.J19.gz43_264455
M00055050B:E11	ES 201	206098	2018.J19.gz43_264839
M00055050D:C01	ES 201	559775	2018.K06.gz43_264248

Table 13

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M00055050D:E03	ES 201	486150	2018.K07.gz43_264264
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M00055051A:B02	ES 201	454810	2018.K11.gz43_264328
M00055051A:C09	ES 201	551068	2018.K12.gz43_264344
M00055051A:E11	ES 201	432970	2018.K14.gz43_264760
M00055051A:G09	ES 201	555340	2018.K15.gz43_264392
M00055051A:G09	ES 201	555340	2018.K15.gz43_264776
M00055051A:H10	ES 201	551897	2018.K16.gz43_264408
M00055051B:B08	ES 201	552641	2018.K17.gz43_264424
M00055051B:B08	ES 201	552641	2018.K17.gz43_264808
M00055051B:D07	ES 201	557572	2018.K19.gz43_264840
M00055051B:G09	ES 201	451027	2018.K21.gz43_264872
M00055051C:B05	ES 201	553349	2018.K23.gz43_264904
M00055051C:F10	ES 201	554372	2018.L04.gz43_264217
M00055051D:D12	ES 201	540000	2018.L05.gz43_264233
M00055051D:F01	ES 201	560801	2018.L07.gz43_264265
M00055051D:G01	ES 201	557882	2018.L08.gz43_264665
M00055052A:F07	ES 201	559246	2018.L12.gz43_264345
M00055052A:H11	ES 201	558029	2018.L14.gz43_264761
M00055052B:E03	ES 201	551371	2018.L17.gz43_264425
M00055052B:E03	ES 201	551371	2018.L17.gz43_264809
M00055052C:B12	ES 201	454664	2018.L20.gz43_264857
M00055052D:B05	ES 201	557382	2018.L24.gz43_264921
M00055052D:G12	ES 201	493261	2018.M06.gz43_264250
M00055053B:A02	ES 201	553108	2018.M11.gz43_264330
M00055053B:A02	ES 201	553108	2018.M11.gz43_264714
M00055053B:C02	ES 201	557525	2018.M13.gz43_264362
M00055053B:C02	ES 201	557525	2018.M13.gz43_264746
M00055053B:C11	ES 201	558560	2018.M14.gz43_264762
M00055053C:A12	ES 201	557345	2018.M16.gz43_264794
M00055053C:B03	ES 201	562292	2018.M17.gz43_264426
M00055053C:B03	ES 201	562292	2018.M17.gz43_264810
M00055053C:F06	ES 201	551334	2018.M19.gz43_264842
M00055053D:G04	ES 201	557939	2018.N01.gz43_264171
M00055054A:A10	ES 201	447555	2018.N03.gz43_264203
M00055054B:E10	ES 201	8997	2018.N13.gz43_264363
M00055054B:E10	ES 201	8997	2018.N13.gz43_264747
M00055054B:F05	ES 201	562115	2018.N15.gz43_264395
M00055054B:G12	ES 201	555082	2018.N17.gz43_264427
M00055054C:G10	ES 201	551616	2018.N20.gz43_264859
M00055054D:A02	ES 201	557308	2018.N21.gz43_264491
M00055054D:E12	ES 201	555057	2018.N22.gz43_264507
M00055054D:H07	ES 201	467081	2018.N23.gz43_264523
M00055054D:H07	ES 201	467081	2018.N23.gz43_264907

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CloneID	ES No	ClusterID	SequenceName
M00055055A:B03	ES 201	561963	2018.N24.gz43_264539
M00055055B:H11	ES 201	528775	2018.O05.gz43_264236
M00055055C:C09	ES 201	498629	2018.O09.gz43_264300
M00055055C:C09	ES 201	498629	2018.O09.gz43_264684
M00055055C:D02	ES 201	515115	2018.O10.gz43_264316
M00055055C:D02	ES 201	515115	2018.O10.gz43_264700
M00055055C:E08	ES 201	553975	2018.O12.gz43_264348
M00055055C:E08	ES 201	553975	2018.O12.gz43_264732
M00055055D:D11	ES 201	551630	2018.O15.gz43_264780
M00055055D:E11	ES 201	476342	2018.O16.gz43_264412
M00055056A:H09	ES 201	394373	2018.O17.gz43_264812
M00055056A:H12	ES 201	463341	2018.O18.gz43_264444
M00055056B:G01	ES 201	551561	2018.O23.gz43_264908
M00055056C:A05	ES 201	549858	2018.P01.gz43_264173
M00055056C:C05	ES 201	557504	2018.P04.gz43_264221
M00055056C:D07	ES 201	553012	2018.P05.gz43_264237
M00055056C:E10	ES 201	505451	2018.P07.gz43_264653
M00055056C:F04	ES 201	562808	2018.P08.gz43_264285
M00055056C:H07	ES 201	385531	2018.P10.gz43_264701
M00055056D:B06	ES 201	557401	2018.P12.gz43_264349
M00055056D:H12	ES 201	556391	2018.P16.gz43_264413
M00055057A:A04	ES 201	562272	2018.P17.gz43_264429
M00055057A:A04	ES 201	562272	2018.P17.gz43_264813
M00055057A:A05	ES 201	553002	2018.P18.gz43_264445
M00055057A:A05	ES 201	553002	2018.P18.gz43_264829
M00055057A:D10	ES 201	559294	2018.P20.gz43_264861
M00055057A:F10	ES 201	451172	2018.P22.gz43_264893
M00055057B:B01	ES 201	551544	2018.P24.gz43_264541
M00055073D:F06	ES 201	555512	2020.A04.gz43_264974
M00055074B:E05	ES 201	455820	2020.A14.gz43_265134
M00055074D:B04	ES 201	562229	2020.A22.gz43_265262
M00055075A:C09	ES 201	556635	2020.B05.gz43_264991
M00055075B:D12	ES 201	556742	2020.B12.gz43_265103
M00055075D:D05	ES 201	560069	2020.B20.gz43_265231
M00055076A:C06	ES 201	558720	2020.C03.gz43_264960
M00055076A:D11	ES 201	555368	2020.C05.gz43_264992
M00055076A:G12	ES 201	557024	2020.C07.gz43_265024
M00055076B:E08	ES 201	452822	2020.C11.gz43_265088
M00055076B:F04	ES 201	549810	2020.C12.gz43_265104
M00055076B:H06	ES 201	550701	2020.C16.gz43_265168
M00055076C:B10	ES 201	559965	2020.C18.gz43_265200
M00055076C:H07	ES 201	557954	2020.C20.gz43_265232
M00055076D:F11	ES 201	557783	2020.C23.gz43_265280
M00055076D:H11	ES 201	553131	2020.D02.gz43_264945

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M00055077A:B07	ES 201	549129	2020.D04.gz43_264977
M00055077A:H10	ES 201	561707	2020.D10.gz43_265073
M00055077D:B01	ES 201	556471	2020.E02.gz43_264946
M00055078A:C05	ES 201	142614	2020.E08.gz43_265042
M00055078A:E10	ES 201	464905	2020.E11.gz43_265090
M00055078A:F01	ES 201	557760	2020.E12.gz43_265106
M00055078A:F04	ES 201	553303	2020.E13.gz43_265122
M00055078B:F05	ES 201	561489	2020.E15.gz43_265154
M00055078D:A07	ES 201	555996	2020.E21.gz43_265250
M00055078D:G04	ES 201	495408	2020.F06.gz43_265011
M00055079A:H05	ES 201	509505	2020.F11.gz43_265091
M00055079B:D02	ES 201	402683	2020.F12.gz43_265107
M00055079C:G06	ES 201	558616	2020.F15.gz43_265155
M00055079D:A03	ES 201	612961	2020.F17.gz43_265187
M00055080A:A07	ES 201	555111	2020.F22.gz43_265267
M00055080A:F05	ES 201	451185	2020.F24.gz43_265299
M00055080B:G10	ES 201	556040	2020.G09.gz43_265060
M00055080D:A01	ES 201	551976	2020.G16.gz43_265172
M00055080D:E07	ES 201	553318	2020.G19.gz43_265220
M00055080D:E10	ES 201	556357	2020.G20.gz43_265236
M00055080D:F01	ES 201	494625	2020.G21.gz43_265252
M00055081A:E08	ES 202	555616	2020.H01.gz43_264933
M00055081B:E10	ES 202	552361	2020.H06.gz43_265013
M00055081C:A12	ES 202	555061	2020.H11.gz43_265093
M00055081C:G01	ES 202	553372	2020.H18.gz43_265205
M00055081C:H04	ES 202	449613	2020.H19.gz43_265221
M00055082A:A12	ES 202	552019	2020.H24.gz43_265301
M00055082D:E08	ES 202	555710	2020.I14.gz43_265142
M00055082D:G01	ES 202	460244	2020.I16.gz43_265174
M00055082D:H02	ES 202	465446	2020.I17.gz43_265190
M00055083B:E05	ES 202	549607	2020.J01.gz43_264935
M00055083B:E07	ES 202	452434	2020.J02.gz43_264951
M00055083B:F10	ES 202	552618	2020.J03.gz43_264967
M00055083C:C05	ES 202	556497	2020.J04.gz43_264983
M00055083C:F05	ES 202	556882	2020.J05.gz43_264999
M00055083D:D08	ES 202	556668	2020.J11.gz43_265095
M00055084A:E10	ES 202	556802	2020.J16.gz43_265175
M00055084A:F10	ES 202	556925	2020.J17.gz43_265191
M00055084B:A04	ES 202	558231	2020.J18.gz43_265207
M00055084D:B01	ES 202	556446	2020.K06.gz43_265016
M00055084D:C09	ES 202	548943	2020.K07.gz43_265032
M00055085A:F12	ES 202	500833	2020.K12.gz43_265112
M00055085B:D02	ES 202	454910	2020.K16.gz43_265176

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CloneID	ES No	ClusterID	SequenceName
M00055085C:E05	ES 202	561753	2020.K19.gz43_265224
M00055085D:D10	ES 202	451134	2020.K21.gz43_265256
M00055085D:F03	ES 202	556881	2020.K23.gz43_265288
M00055085D:G09	ES 202	555725	2020.K24.gz43_265304
M00055086A:B10	ES 202	492893	2020.L01.gz43_264937
M00055086A:C09	ES 202	556542	2020.L02.gz43_264953
M00055086B:D10	ES 202	557476	2020.L06.gz43_265017
M00055086D:C07	ES 202	551342	2020.L13.gz43_265129
M00055086D:H07	ES 202	557214	2020.L16.gz43_265177
M00055087B:C03	ES 202	122169	2020.L22.gz43_265273
M00055087B:C05	ES 202	451885	2020.L23.gz43_265289
M00055087D:D08	ES 202	453756	2020.M08.gz43_265050
M00055088C:B02	ES 202	450352	2020.M20.gz43_265242
M00055088C:D01	ES 202	561975	2020.M22.gz43_265274
M00055088C:D02	ES 202	557747	2020.M23.gz43_265290
M00055088D:A01	ES 202	551283	2020.N02.gz43_264955
M00055088D:B08	ES 202	561422	2020.N04.gz43_264987
M00055089A:H06	ES 202	557454	2020.N09.gz43_265067
M00055089B:C01	ES 202	554084	2020.N12.gz43_265115
M00055089C:B06	ES 202	556465	2020.N16.gz43_265179
M00055089C:D06	ES 202	560507	2020.N19.gz43_265227
M00055090A:F02	ES 202	560080	2020.N22.gz43_265275
M00055090C:B03	ES 202	556408	2020.O04.gz43_264988
M00055090C:C12	ES 202	556559	2020.O06.gz43_265020
M00055090C:D01	ES 202	556675	2020.O07.gz43_265036
M00055090C:G06	ES 202	451370	2020.O09.gz43_265068
M00055090D:E03	ES 202	497086	2020.O14.gz43_265148
M00055090D:F03	ES 202	98869	2020.O17.gz43_265196
M00055091A:C09	ES 202	598101	2020.O23.gz43_265292
M00055091A:F05	ES 202	459581	2020.P04.gz43_264989
M00055091B:A07	ES 202	555126	2020.P07.gz43_265037
M00055091B:C11	ES 202	555418	2020.P08.gz43_265053
M00055091C:B04	ES 202	468262	2020.P12.gz43_265117
M00055091C:D11	ES 202	559071	2020.P15.gz43_265165
M00055091C:G11	ES 202	561593	2020.P18.gz43_265213
M00055091D:A03	ES 202	554828	2020.P21.gz43_265261
M00055092B:G09	ES 202	637966	2029.A15.gz43_265534
M00055093A:E09	ES 202	562542	2029.B05.gz43_265375
M00055093A:F07	ES 202	562768	2029.B06.gz43_265391
M00055093B:G08	ES 202	562881	2029.B14.gz43_265519
M00055094B:B11	ES 202	562307	2029.C11.gz43_265472
M00055094C:C10	ES 202	402488	2029.C21.gz43_265632
M00055094D:F09	ES 202	491127	2029.D06.gz43_265393
M00055095A:D08	ES 202	98484	2029.D11.gz43_265473

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M00055096A:G08	ES 202	551967	2029.E09.gz43_265442
M00055096C:C03	ES 202	554496	2029.E16.gz43_265554
M00055096D:F02	ES 202	553380	2029.E22.gz43_265650
M00055097A:G06	ES 202	455820	2029.F06.gz43_265395
M00055097B:B12	ES 202	453533	2029.F09.gz43_265443
M00055097B:F08	ES 202	562719	2029.F10.gz43_265459
M00055098D:A09	ES 202	561215	2029.G03.gz43_265348
M00055099A:G05	ES 202	558118	2029.G11.gz43_265476
M00055100A:C05	ES 202	555330	2029.H07.gz43_265413
M00055100B:F11	ES 202	558186	2029.H15.gz43_265541
M00055100C:E03	ES 202	559125	2029.H22.gz43_265653
M00055100C:F11	ES 202	452349	2029.I01.gz43_265318
M00055100C:H06	ES 202	562989	2029.I02.gz43_265334
M00055100D:B02	ES 202	562243	2029.I03.gz43_265350
M00055102A:E11	ES 202	560628	2029.I20.gz43_265622
M00055102B:B03	ES 202	560111	2029.I21.gz43_265638
M00055103A:H11	ES 202	561144	2029.J16.gz43_265559
M00055103C:B07	ES 202	558511	2029.J20.gz43_265623
M00055103C:D05	ES 202	556613	2029.J21.gz43_265639
M00055103C:G03	ES 202	560898	2029.J22.gz43_265655
M00055104B:F09	ES 202	553548	2029.K14.gz43_265528
M00055104D:E02	ES 202	455878	2029.K20.gz43_265624
M00055105A:A05	ES 202	559955	2029.K23.gz43_265672
M00055105D:B06	ES 202	552704	2029.L07.gz43_265417
M00055106A:E04	ES 202	560575	2029.L15.gz43_265545
M00055106C:B06	ES 202	454499	2029.L22.gz43_265657
M00055109C:G10	ES 202	455529	2029.O01.gz43_265324
M00055110A:C03	ES 202	561426	2029.O08.gz43_265436
M00055110A:C05	ES 202	394189	2029.O09.gz43_265452
M00055111A:F10	ES 202	562748	2029.P01.gz43_265325
M00055111C:B07	ES 202	558186	2029.P05.gz43_265389
M00055111D:F10	ES 202	518735	2029.P16.gz43_265565
M00055113A:G08	ES 202	562822	2030.A11.gz43_265854
M00055113B:F02	ES 202	562714	2030.A12.gz43_265870
M00055113C:F09	ES 202	551734	2030.A14.gz43_265902
M00055114A:E02	ES 202	561741	2030.A18.gz43_265966
M00055115C:F04	ES 202	549948	2030.B23.gz43_266047
M00055115C:G09	ES 202	449035	2030.C02.gz43_265712
M00055116A:C07	ES 202	453274	2030.C12.gz43_265872
M00055116A:H06	ES 202	453692	2030.C19.gz43_265984
M00055117A:G08	ES 202	312036	2030.D10.gz43_265841
M00055117C:C03	ES 202	549591	2030.D16.gz43_265937
M00055117C:F02	ES 202	561265	2030.D17.gz43_265953
M00055118B:A09	ES 202	554737	2030.D24.gz43_266065

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M00055118C:B03	ES 202	452525	2030.E03.gz43_265730
M00055118D:B04	ES 202	560868	2030.E05.gz43_265762
M00055119B:B08	ES 202	560077	2030.E12.gz43_265874
M00055119D:F08	ES 202	526334	2030.E14.gz43_265906
M00055120B:F12	ES 202	556310	2030.E19.gz43_265986
M00055120C:F10	ES 202	560506	2030.E22.gz43_266034
M00055120D:H07	ES 202	63602	2030.F01.gz43_265699
M00055121D:H11	ES 202	507660	2030.F09.gz43_265827
M00055122C:B12	ES 202	448905	2030.F16.gz43_265939
M00055123A:D12	ES 202	560399	2030.F23.gz43_266051
M00055124A:F01	ES 202	479732	2030.G08.gz43_265812
M00055124B:A11	ES 202	558060	2030.G11.gz43_265860
M00055124C:C12	ES 202	553142	2030.G17.gz43_265956
M00055124D:A09	ES 202	451089	2030.G23.gz43_266052
M00055124D:B10	ES 202	553841	2030.H02.gz43_265717
M00055125A:A02	ES 202	538830	2030.H05.gz43_265765
M00055125B:F01	ES 202	558534	2030.H09.gz43_265829
M00055125C:H03	ES 202	557895	2030.H16.gz43_265941
M00055125D:E02	ES 202	558452	2030.H20.gz43_266005
M00055126C:G05	ES 202	561685	2030.I06.gz43_265782
M00055127B:A01	ES 202	559938	2030.I12.gz43_265878
M00055128A:C10	ES 202	554233	2030.J01.gz43_265703
M00055128B:B08	ES 202	561679	2030.J06.gz43_265783
M00055128B:B12	ES 202	528369	2030.J07.gz43_265799
M00055128B:E12	ES 202	461653	2030.J10.gz43_265847
M00055128B:G01	ES 202	407964	2030.J13.gz43_265895
M00055128C:E03	ES 202	554989	2030.J16.gz43_265943
M00055128D:C11	ES 202	561279	2030.J22.gz43_266039
M00055128D:D04	ES 202	557615	2030.K01.gz43_265704
M00055129A:B03	ES 202	486683	2030.K05.gz43_265768
M00055129B:H07	ES 202	558024	2030.K18.gz43_265976
M00055129C:H08	ES 202	452759	2030.K24.gz43_266072
M00055129D:C02	ES 202	452775	2030.L03.gz43_265737
M00055129D:F11	ES 202	488030	2030.L06.gz43_265785
M00055130A:D10	ES 202	557610	2030.L11.gz43_265865
M00055130B:D07	ES 202	380636	2030.L17.gz43_265961
M00055130D:F08	ES 202	66678	2030.M06.gz43_265786
M00055131A:A04	ES 202	518007	2030.M10.gz43_265850
M00055131A:D07	ES 202	449454	2030.M13.gz43_265898
M00055131C:H12	ES 202	562822	2030.N04.gz43_265755
M00055132B:B12	ES 202	288134	2030.N12.gz43_265883
M00055132D:E07	ES 202	610269	2030.N21.gz43_266027
M00055132D:E10	ES 202	557719	2030.N22.gz43_266043
M00055132D:F05	ES 202	548991	2030.N23.gz43_266059

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CloneID	ES No	ClusterID	SequenceName
M00055133B:B06	ES 202	400628	2030.O05.gz43_265772
M00055133B:E04	ES 202	557741	2030.O07.gz43_265804
M00055133B:E08	ES 202	557747	2030.O08.gz43_265820
M00055133B:F07	ES 202	451618	2030.O10.gz43_265852
M00055133C:C06	ES 202	562760	2030.O13.gz43_265900
M00055133C:G07	ES 202	451392	2030.O15.gz43_265932
M00055133C:H11	ES 202	558015	2030.O17.gz43_265964
M00055133D:A02	ES 202	477295	2030.O18.gz43_265980
M00055133D:F02	ES 202	451391	2030.O22.gz43_266044
M00055134A:C03	ES 202	553871	2030.O24.gz43_266076
M00055134C:A01	ES 202	557284	2030.P11.gz43_265869
M00055134C:B01	ES 202	551068	2030.P12.gz43_265885
M00055134C:E09	ES 202	557710	2030.P13.gz43_265901
M00055134D:B03	ES 202	407077	2030.P17.gz43_265965
M00055135A:D08	ES 202	557549	2030.P23.gz43_266061
M00055135A:E07	ES 202	562683	2031.A01.gz43_266078
M00055135A:H10	ES 202	562725	2031.A02.gz43_266094
M00055136C:F11	ES 202	562449	2031.A24.gz43_266446
M00055136D:D09	ES 202	558768	2031.B05.gz43_266143
M00055137A:E05	ES 202	550047	2031.B10.gz43_266223
M00055137B:B11	ES 202	556630	2031.B14.gz43_266287
M00055137B:F12	ES 202	558477	2031.B16.gz43_266319
M00055138A:E08	ES 202	558463	2031.C04.gz43_266128
M00055138A:F01	ES 202	558544	2031.C05.gz43_266144
M00055138A:G08	ES 202	558619	2031.C06.gz43_266160
M00055138B:H12	ES 202	446873	2031.C11.gz43_266240
M00055138C:A07	ES 202	556328	2031.C12.gz43_266256
M00055139B:E10	ES 202	553969	2031.D09.gz43_266209
M00055139B:G03	ES 202	558230	2031.D11.gz43_266241
M00055140A:G07	ES 202	557893	2031.D22.gz43_266417
M00055143B:C11	ES 202	555754	2031.G02.gz43_266100
M00055144A:A11	ES 202	561245	2031.G05.gz43_266148
M00055144A:E09	ES 202	450630	2031.G06.gz43_266164
M00055144B:A12	ES 202	506372	2031.G11.gz43_266244
M00055145B:F03	ES 202	490032	2031.H18.gz43_266357
M00055146A:B12	ES 202	211273	2031.I04.gz43_266134
M00055146B:E09	ES 202	562000	2031.I10.gz43_266230
M00055148A:E06	ES 202	289328	2031.J13.gz43_266279
M00055149B:F09	ES 203	557783	2031.K05.gz43_266152
M00055149C:A11	ES 203	553500	2031.K08.gz43_266200
M00055150D:C06	ES 203	160289	2031.L10.gz43_266233
M00055151A:C10	ES 203	557522	2031.L14.gz43_266297
M00055151A:F10	ES 203	610893	2031.L18.gz43_266361



Table 13

CloneID	ES No	ClusterID	SequenceName
M00055152A:B05	ES 203	490846	2031.M08.gz43_266202
M00055152A:E09	ES 203	549739	2031.M12.gz43_266266
M00055152B:A03	ES 203	557250	2031.M16.gz43_266330
M00055152D:C03	ES 203	468257	2031.N04.gz43_266139
M00055152D:H09	ES 203	497493	2031.N07.gz43_266187
M00055154D:F06	ES 203	549930	2031.O05.gz43_266156
M00055154D:G12	ES 203	524721	2031.O06.gz43_266172
M00055155D:B02	ES 203	557708	2031.O24.gz43_266460
M00055156A:D02	ES 203	561624	2031.P06.gz43_266173
M00055156B:C11	ES 203	558645	2031.P08.gz43_266205
M00055156C:A08	ES 203	558007	2031.P09.gz43_266221
M00055156C:D06	ES 203	561558	2031.P12.gz43_266269
M00055156D:A02	ES 203	561178	2031.P15.gz43_266317
M00055157A:B04	ES 203	556288	2031.P17.gz43_266349
M00055157C:C11	ES 203	559389	2032.A05.gz43_266526
M00055158A:D09	ES 203	555210	2032.A10.gz43_266606
M00055158D:C01	ES 203	394772	2032.A19.gz43_266750
M00055158D:D10	ES 203	560296	2032.A20.gz43_266766
M00055159B:B08	ES 203	561308	2032.B04.gz43_266511
M00055159B:G09	ES 203	561911	2032.B12.gz43_266639
M00055159C:B02	ES 203	215005	2032.B16.gz43_266703
M00055159D:F09	ES 203	554885	2032.B24.gz43_266831
M00055160C:D02	ES 203	553537	2032.C10.gz43_266608
M00055161A:C02	ES 203	561507	2032.C21.gz43_266784
M00055161A:E05	ES 203	558395	2032.C23.gz43_266816
M00055161B:A07	ES 203	452901	2032.D06.gz43_266545
M00055161D:H03	ES 203	447386	2032.D23.gz43_266817
M00055162A:B03	ES 203	562881	2032.E01.gz43_266466
M00055162A:C12	ES 203	451458	2032.E03.gz43_266498
M00055162A:G12	ES 203	561994	2032.E07.gz43_266562
M00055162B:B04	ES 203	561413	2032.E10.gz43_266610
M00055162C:E12	ES 203	553877	2032.E19.gz43_266754
M00055162C:G03	ES 203	323165	2032.E20.gz43_266770
M00055162D:B01	ES 203	555883	2032.E22.gz43_266802
M00055162D:G04	ES 203	561918	2032.E24.gz43_266834
M00055163B:F07	ES 203	561876	2032.F10.gz43_266611
M00055164C:C10	ES 203	558965	2032.G11.gz43_266628
M00055164D:C05	ES 203	555200	2032.G18.gz43_266740
M00055165A:F05	ES 203	559389	2032.G24.gz43_266836
M00055165B:G09	ES 203	559562	2032.H05.gz43_266533
M00055165C:H08	ES 203	558917	2032.H07.gz43_266565
M00055165D:C03	ES 203	553797	2032.H10.gz43_266613
M00055166B:D07	ES 203	452874	2032.H19.gz43_266757
M00055166C:G01	ES 203	488108	2032.H23.gz43_266821

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055166D:F02	ES 203	559464	2032.I04.gz43_266518
M00055166D:F09	ES 203	555418	2032.I05.gz43_266534
M00055167A:A02	ES 203	493261	2032.I07.gz43_266566
M00055167B:A08	ES 203	557961	2032.I12.gz43_266646
M00055167B:H07	ES 203	415538	2032.I15.gz43_266694
M00055167D:B05	ES 203	558858	2032.I19.gz43_266758
M00055168B:F11	ES 203	557316	2032.J06.gz43_266551
M00055169B:F04	ES 203	559355	2032.J19.gz43_266759
M00055169B:H08	ES 203	550674	2032.J21.gz43_266791
M00055169D:A11	ES 203	558720	2032.K02.gz43_266488
M00055170A:A09	ES 203	557209	2032.K06.gz43_266552
M00055170A:A11	ES 203	558755	2032.K07.gz43_266568
M00055170B:B06	ES 203	558022	2032.K12.gz43_266648
M00055170D:B09	ES 203	494198	2032.L01.gz43_266473
M00055171C:C01	ES 203	450566	2032.L23.gz43_266825
M00055172A:A01	ES 203	550085	2032.M02.gz43_266490
M00055172A:C09	ES 203	559015	2032.M05.gz43_266538
M00055172A:F03	ES 203	554604	2032.M06.gz43_266554
M00055172B:B04	ES 203	558900	2032.M09.gz43_266602
M00055172B:H07	ES 203	409262	2032.M12.gz43_266650
M00055172D:D04	ES 203	559057	2032.M15.gz43_266698
M00055172D:D07	ES 203	556542	2032.M16.gz43_266714
M00055172D:F12	ES 203	551693	2032.M19.gz43_266762
M00055174A:H12	ES 203	555202	2032.M24.gz43_266842
M00055174B:B04	ES 203	550175	2032.N01.gz43_266475
M00055176A:A02	ES 203	553047	2032.N11.gz43_266635
M00055176A:B03	ES 203	553713	2032.N13.gz43_266667
M00055176D:H01	ES 203	559752	2032.N24.gz43_266843
M00055177A:F05	ES 203	551475	2032.O01.gz43_266476
M00055177D:F07	ES 203	562989	2032.O17.gz43_266732
M00055178A:C07	ES 203	558981	2032.O20.gz43_266780
M00055178A:D03	ES 203	559088	2032.O22.gz43_266812
M00055179A:G08	ES 203	561975	2041.A02.gz43_266862
M00055179A:H11	ES 203	479851	2041.A03.gz43_266878
M00055179B:C07	ES 203	450289	2041.A04.gz43_266894
M00055179B:D05	ES 203	559050	2041.A05.gz43_266910
M00055179B:G07	ES 203	559000	2041.A08.gz43_266958
M00055179C:F11	ES 203	559383	2041.A10.gz43_266990
M00055179C:H02	ES 203	559710	2041.A11.gz43_267006
M00055179D:C10	ES 203	555739	2041.A14.gz43_267054
M00055181A:E01	ES 203	549829	2041.A20.gz43_267150
M00055181A:G02	ES 203	557644	2041.A22.gz43_267182
M00055181A:H01	ES 203	559194	2041.A24.gz43_267214
M00055181B:A10	ES 203	478511	2041.B01.gz43_266847

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055181B:E06	ES 203	549472	2041.B03.gz43_266879
M00055181C:B07	ES 203	476199	2041.B07.gz43_266943
M00055181C:B12	ES 203	553002	2041.B08.gz43_266959
M00055181C:C09	ES 203	561513	2041.B09.gz43_266975
M00055181C:D06	ES 203	562569	2041.B11.gz43_267007
M00055181C:H01	ES 203	561351	2041.B17.gz43_267103
M00055181D:D05	ES 203	473742	2041.B21.gz43_267167
M00055182A:D07	ES 203	554520	2041.C05.gz43_266912
M00055182B:C07	ES 203	226324	2041.C08.gz43_266960
M00055182B:F05	ES 203	556632	2041.C09.gz43_266976
M00055182C:E09	ES 203	556881	2041.C17.gz43_267104
M00055182D:E06	ES 203	559333	2041.C21.gz43_267168
M00055182D:H08	ES 203	557961	2041.C23.gz43_267200
M00055183A:C06	ES 203	456517	2041.D01.gz43_266849
M00055183A:E10	ES 203	557714	2041.D02.gz43_266865
M00055183C:A02	ES 203	562840	2041.D08.gz43_266961
M00055183C:D07	ES 203	561963	2041.D12.gz43_267025
M00055184A:G02	ES 203	557935	2041.D19.gz43_267137
M00055184B:H01	ES 203	560308	2041.E02.gz43_266866
M00055184C:C07	ES 203	558212	2041.E04.gz43_266898
M00055184C:D02	ES 203	409612	2041.E05.gz43_266914
M00055184C:D11	ES 203	551879	2041.E07.gz43_266946
M00055184C:F01	ES 203	561513	2041.E08.gz43_266962
M00055185A:B01	ES 203	451761	2041.E12.gz43_267026
M00055185A:G11	ES 203	558582	2041.E14.gz43_267058
M00055185B:B01	ES 203	559883	2041.E16.gz43_267090
M00055185C:B01	ES 203	411113	2041.E22.gz43_267186
M00055185D:A02	ES 203	561687	2041.F03.gz43_266883
M00055185D:D11	ES 203	555394	2041.F06.gz43_266931
M00055185D:F07	ES 203	477046	2041.F08.gz43_266963
M00055185D:H01	ES 203	502343	2041.F10.gz43_266995
M00055186A:D04	ES 203	552629	2041.F11.gz43_267011
M00055186A:E08	ES 203	557867	2041.F12.gz43_267027
M00055186C:A01	ES 203	459103	2041.F15.gz43_267075
M00055186C:A02	ES 203	481136	2041.F16.gz43_267091
M00055187A:F02	ES 203	516484	2041.G07.gz43_266948
M00055187A:F06	ES 203	492627	2041.G08.gz43_266964
M00055187A:G02	ES 203	552629	2041.G09.gz43_266980
M00055187B:C01	ES 203	364462	2041.G11.gz43_267012
M00055187C:C02	ES 203	551855	2041.G15.gz43_267076
M00055187C:E07	ES 203	549588	2041.G17.gz43_267108
M00055187D:A08	ES 203	557298	2041.G19.gz43_267140
M00055187D:F01	ES 203	560294	2041.G23.gz43_267204
M00055187D:G11	ES 203	557895	2041.H01.gz43_266853

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055188A:G11	ES 203	559610	2041.H06.gz43_266933
M00055188A:H10	ES 203	187704	2041.H07.gz43_266949
M00055188B:E06	ES 203	559262	2041.H08.gz43_266965
M00055188B:G06	ES 203	555649	2041.H09.gz43_266981
M00055188C:A08	ES 203	448046	2041.H12.gz43_267029
M00055188C:F08	ES 203	549665	2041.H14.gz43_267061
M00055188D:D05	ES 203	559146	2041.H19.gz43_267141
M00055188D:F10	ES 203	561685	2041.H20.gz43_267157
M00055188D:H03	ES 203	559825	2041.H21.gz43_267173
M00055189A:C11	ES 203	558463	2041.H24.gz43_267221
M00055189B:B02	ES 203	452094	2041.I04.gz43_266902
M00055189B:B12	ES 203	560080	2041.I06.gz43_266934
M00055189C:C01	ES 203	413915	2041.I10.gz43_266998
M00055190A:A05	ES 203	523332	2041.I15.gz43_267078
M00055190A:F11	ES 203	455814	2041.I19.gz43_267142
M00055190C:G08	ES 203	560859	2041.I24.gz43_267222
M00055191B:A10	ES 203	488613	2041.J05.gz43_266919
M00055191B:E04	ES 203	560674	2041.J07.gz43_266951
M00055191C:C06	ES 203	447412	2041.J10.gz43_266999
M00055191D:C05	ES 203	560213	2041.J13.gz43_267047
M00055192A:A09	ES 203	559883	2041.J15.gz43_267079
M00055192C:A03	ES 203	499903	2041.J22.gz43_267191
M00055192C:D04	ES 203	491992	2041.K01.gz43_266856
M00055192C:E04	ES 203	550874	2041.K02.gz43_266872
M00055192C:H06	ES 203	558326	2041.K05.gz43_266920
M00055193A:A08	ES 203	560003	2041.K11.gz43_267016
M00055193A:C06	ES 203	451544	2041.K14.gz43_267064
M00055193B:A08	ES 203	624044	2041.K18.gz43_267128
M00055193C:C11	ES 203	539142	2041.L02.gz43_266873
M00055193C:E10	ES 203	504880	2041.L03.gz43_266889
M00055193D:G07	ES 203	552977	2041.L08.gz43_266969
M00055194A:A01	ES 203	495591	2041.L10.gz43_267001
M00055194A:E07	ES 203	558413	2041.L13.gz43_267049
M00055194B:C01	ES 203	559234	2041.L15.gz43_267081
M00055194B:G04	ES 203	513168	2041.L16.gz43_267097
M00055194D:C05	ES 203	549911	2041.M02.gz43_266874
M00055195A:B08	ES 203	549304	2041.M09.gz43_266986
M00055195A:C10	ES 203	550704	2041.M11.gz43_267018
M00055195A:E07	ES 203	143218	2041.M12.gz43_267034
M00055195B:B09	ES 203	450623	2041.M14.gz43_267066
M00055195B:C04	ES 203	614369	2041.M15.gz43_267082
M00055195C:F09	ES 203	561659	2041.N01.gz43_266859
M00055195C:H05	ES 203	561830	2041.N02.gz43_266875
M00055195D:B10	ES 203	555742	2041.N06.gz43_266939

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055195D:E11	ES 203	550652	2041.N09.gz43_266987
M00055196A:C04	ES 203	495074	2041.N12.gz43_267035
M00055196A:E01	ES 203	551977	2041.N13.gz43_267051
M00055196A:H07	ES 203	553237	2041.N15.gz43_267083
M00055196B:A09	ES 203	552879	2041.N17.gz43_267115
M00055196B:C06	ES 203	562336	2041.N18.gz43_267131
M00055196C:B07	ES 203	456697	2041.N24.gz43_267227
M00055196D:A10	ES 203	556538	2041.O08.gz43_266972
M00055196D:F07	ES 203	481231	2041.O10.gz43_267004
M00055196D:H02	ES 203	562569	2041.O11.gz43_267020
M00055197B:A10	ES 203	559885	2041.O16.gz43_267100
M00055197B:B06	ES 204	558642	2041.O18.gz43_267132
M00055197C:D10	ES 204	625988	2041.O21.gz43_267180
M00055198A:E05	ES 204	460727	2041.P06.gz43_266941
M00055198B:H08	ES 204	490154	2041.P09.gz43_266989
M00055198C:C12	ES 204	551374	2041.P11.gz43_267021
M00055198C:F02	ES 204	557852	2041.P13.gz43_267053
M00055198C:G07	ES 204	561753	2041.P14.gz43_267069
M00055198D:A12	ES 204	551415	2041.P16.gz43_267101
M00055198D:B08	ES 204	556343	2041.P17.gz43_267117
M00055198D:G01	ES 204	550782	2041.P20.gz43_267165
M00055198D:G03	ES 204	491260	2041.P21.gz43_267181
M00055219B:B04	ES 204	554627	2043.A06.gz43_259273
M00055219C:C10	ES 204	556790	2043.A14.gz43_259401
M00055219C:H06	ES 204	558652	2043.A17.gz43_259449
M00055220B:H06	ES 204	490414	2043.B06.gz43_259274
M00055220D:G07	ES 204	557965	2043.B12.gz43_259370
M00055221A:D10	ES 204	549634	2043.B17.gz43_259450
M00055221D:A06	ES 204	558055	2043.C07.gz43_259291
M00055221D:H08	ES 204	467710	2043.C11.gz43_259355
M00055222A:A06	ES 204	460493	2043.C12.gz43_259371
M00055222A:C08	ES 204	464067	2043.C13.gz43_259387
M00055222B:A01	ES 204	552086	2043.C18.gz43_259467
M00055222B:A06	ES 204	451966	2043.C19.gz43_259483
M00055222D:B11	ES 204	558185	2043.D03.gz43_259228
M00055223B:C04	ES 204	552521	2043.D13.gz43_259388
M00055223D:F10	ES 204	621635	2043.D23.gz43_259548
M00055223D:H03	ES 204	559764	2043.D24.gz43_259564
M00055224B:E12	ES 204	561289	2043.E04.gz43_259245
M00055225B:H01	ES 204	560717	2043.E24.gz43_259565
M00055225C:E08	ES 204	550632	2043.F03.gz43_259230
M00055225D:G11	ES 204	491240	2043.F09.gz43_259326
M00055226B:F10	ES 204	556123	2043.F20.gz43_259502

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055226C:A11	ES 204	489275	2043.F23.gz43_259550
M00055226C:H05	ES 204	558679	2043.G08.gz43_259311
M00055227C:D02	ES 204	550815	2043.H09.gz43_259328
M00055227D:E07	ES 204	550571	2043.H16.gz43_259440
M00055227D:G10	ES 204	559101	2043.H17.gz43_259456
M00055228B:E07	ES 204	554181	2043.H21.gz43_259520
M00055229B:E12	ES 204	452598	2043.I12.gz43_259377
M00055229B:H11	ES 204	559729	2043.I15.gz43_259425
M00055229C:D01	ES 204	559053	2043.I17.gz43_259457
M00055229D:D07	ES 204	543540	2043.I22.gz43_259537
M00055230A:H01	ES 204	551677	2043.J03.gz43_259234
M00055231D:G01	ES 204	560986	2043.J22.gz43_259538
M00055232A:A09	ES 204	460680	2043.J23.gz43_259554
M00055232C:D04	ES 204	557411	2043.K14.gz43_259411
M00055233C:F09	ES 204	559447	2043.L05.gz43_259268
M00055233D:G11	ES 204	559884	2043.L15.gz43_259428
M00055234A:G12	ES 204	552430	2043.L18.gz43_259476
M00055235B:C01	ES 204	374281	2043.M12.gz43_259381
M00055236A:B01	ES 204	466887	2043.M19.gz43_259493
M00055236B:C07	ES 204	450193	2043.M23.gz43_259557
M00055236C:E05	ES 204	451720	2043.N03.gz43_259238
M00055236D:E04	ES 204	558422	2043.N06.gz43_259286
M00055236D:E10	ES 204	557140	2043.N07.gz43_259302
M00055238D:D10	ES 204	557656	2043.O23.gz43_259559
M00055239B:C05	ES 204	558230	2043.P05.gz43_259272
M00055239C:F08	ES 204	481362	2043.P10.gz43_259352
M00055239D:C01	ES 204	552019	2043.P13.gz43_259400
M00055239D:G04	ES 204	557676	2043.P16.gz43_259448
M00055240A:B07	ES 204	562317	2043.P19.gz43_259496
M00055240B:E12	ES 204	552249	2043.P24.gz43_259576
M00055240C:A03	ES 204	558093	2044.A03.gz43_259613
M00055240C:D06	ES 204	43349	2044.A04.gz43_259629
M00055240D:D12	ES 204	497119	2044.A10.gz43_259725
M00055241A:C06	ES 204	450025	2044.A15.gz43_259805
M00055241D:F10	ES 204	616134	2044.B03.gz43_259614
M00055242D:E02	ES 204	541784	2044.B22.gz43_259918
M00055243D:C06	ES 204	486787	2044.C16.gz43_259823
M00055244A:C06	ES 204	238121	2044.C20.gz43_259887
M00055244B:F02	ES 204	558500	2044.D01.gz43_259584
M00055244B:G10	ES 204	38280	2044.D04.gz43_259632
M00055244D:C07	ES 204	560317	2044.D09.gz43_259712
M00055244D:D09	ES 204	549493	2044.D10.gz43_259728
M00055244D:G08	ES 204	549889	2044.D13.gz43_259776
M00055245B:H01	ES 204	629002	2044.D20.gz43_259888

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055245C:D04	ES 204	560507	2044.D22.gz43_259920
M00055245D:A04	ES 204	558355	2044.E03.gz43_259617
M00055245D:D01	ES 204	551305	2044.E06.gz43_259665
M00055246A:C01	ES 204	560317	2044.E09.gz43_259713
M00055246A:E10	ES 204	560669	2044.E10.gz43_259729
M00055246B:C04	ES 204	560204	2044.E14.gz43_259793
M00055246B:D10	ES 204	484086	2044.E15.gz43_259809
M00055246C:A10	ES 204	557389	2044.E16.gz43_259825
M00055246C:F08	ES 204	561579	2044.E17.gz43_259841
M00055247B:A11	ES 204	607430	2044.F04.gz43_259634
M00055247C:B01	ES 204	557389	2044.F05.gz43_259650
M00055248A:F10	ES 204	558461	2044.F14.gz43_259794
M00055248B:B03	ES 204	560099	2044.F15.gz43_259810
M00055248C:B11	ES 204	555340	2044.F22.gz43_259922
M00055248D:B12	ES 204	556829	2044.G02.gz43_259603
M00055249B:G08	ES 204	550830	2044.G18.gz43_259859
M00055249C:B12	ES 204	560059	2044.G22.gz43_259923
M00055250B:A05	ES 204	504415	2044.H06.gz43_259668
M00055250B:G09	ES 204	552357	2044.H09.gz43_259716
M00055250C:F03	ES 204	616196	2044.H10.gz43_259732
M00055251A:B09	ES 204	488143	2044.H18.gz43_259860
M00055251C:D01	ES 204	549052	2044.I06.gz43_259669
M00055251C:H07	ES 204	523732	2044.I11.gz43_259749
M00055251D:B09	ES 204	464205	2044.I14.gz43_259797
M00055251D:H11	ES 204	500737	2044.I18.gz43_259861
M00055252A:H09	ES 204	558670	2044.I24.gz43_259957
M00055252B:D07	ES 204	558785	2044.J03.gz43_259622
M00055252C:B04	ES 204	557256	2044.J05.gz43_259654
M00055252C:E02	ES 204	159419	2044.J08.gz43_259702
M00055252D:C10	ES 204	447380	2044.J14.gz43_259798
M00055253A:C07	ES 204	560205	2044.J17.gz43_259846
M00055253D:C03	ES 204	560261	2044.K01.gz43_259591
M00055254A:E02	ES 204	557928	2044.K05.gz43_259655
M00055254C:A06	ES 204	493359	2044.K11.gz43_259751
M00055254D:B10	ES 204	558861	2044.K15.gz43_259815
M00055255A:F11	ES 204	494130	2044.K24.gz43_259959
M00055255B:A10	ES 204	450405	2044.L01.gz43_259592
M00055255B:F05	ES 204	558512	2044.L04.gz43_259640
M00055256A:D12	ES 204	562256	2044.L16.gz43_259832
M00055256B:C07	ES 204	562256	2044.L21.gz43_259912
M00055256B:G05	ES 204	557928	2044.L24.gz43_259960
M00055257A:D01	ES 204	549456	2044.M16.gz43_259833
M00055257B:B10	ES 204	558134	2044.M17.gz43_259849
M00055257D:A11	ES 204	488574	2044.N04.gz43_259642

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055257D:E02	ES 204	554246	2044.N07.gz43_259690
M00055258A:C07	ES 204	423884	2044.N10.gz43_259738
M00055259A:G06	ES 204	138927	2044.O06.gz43_259675
M00055259B:G11	ES 204	558559	2044.O14.gz43_259803
M00055259C:G10	ES 204	476373	2044.O17.gz43_259851
M00055260B:A05	ES 204	558098	2044.P04.gz43_259644
M00055260B:H06	ES 204	460049	2044.P08.gz43_259708
M00055260C:A11	ES 204	560144	2044.P09.gz43_259724
M00055260C:A12	ES 204	557734	2044.P10.gz43_259740
M00055260D:D04	ES 204	562926	2044.P20.gz43_259900
M00055261A:D11	ES 204	558357	2053.A03.gz43_260006
M00055261B:G12	ES 204	550863	2053.A12.gz43_260150
M00055261D:D09	ES 204	128962	2053.A20.gz43_260278
M00055262A:C05	ES 204	558281	2053.B02.gz43_259991
M00055262B:A11	ES 204	558120	2053.B05.gz43_260039
M00055262B:C01	ES 204	554373	2053.B06.gz43_260055
M00055262C:B08	ES 204	558052	2053.B11.gz43_260135
M00055262C:F05	ES 204	446557	2053.B14.gz43_260183
M00055263C:D02	ES 204	478087	2053.C10.gz43_260120
M00055263C:F10	ES 204	450242	2053.C13.gz43_260168
M00055263C:G09	ES 204	505858	2053.C15.gz43_260200
M00055263D:C03	ES 204	554000	2053.C19.gz43_260264
M00055264A:F03	ES 204	511276	2053.D05.gz43_260041
M00055264B:E06	ES 204	556019	2053.D08.gz43_260089
M00055264B:H12	ES 204	450507	2053.D10.gz43_260121
M00055264D:A03	ES 204	551272	2053.D14.gz43_260185
M00055264D:E09	ES 204	557713	2053.D18.gz43_260249
M00055265A:G01	ES 204	34381	2053.E02.gz43_259994
M00055265A:G07	ES 204	555564	2053.E03.gz43_260010
M00055265C:A04	ES 204	512721	2053.E10.gz43_260122
M00055265C:D09	ES 204	560520	2053.E13.gz43_260170
M00055265C:E01	ES 204	560678	2053.E14.gz43_260186
M00055265C:F01	ES 204	557561	2053.E15.gz43_260202
M00055266A:H08	ES 204	559910	2053.F03.gz43_260011
M00055266B:C12	ES 204	550074	2053.F05.gz43_260043
M00055266D:C09	ES 204	557561	2053.F14.gz43_260187
M00055267A:D01	ES 204	487961	2053.F21.gz43_260299
M00055267A:G11	ES 204	511847	2053.F22.gz43_260315
M00055267B:B06	ES 204	561666	2053.F24.gz43_260347
M00055267D:G08	ES 204	562269	2053.G18.gz43_260252
M00055268B:D12	ES 204	556447	2053.H02.gz43_259997
M00055268D:G09	ES 204	448450	2053.H15.gz43_260205
M00055270D:B05	ES 204	475578	2053.I15.gz43_260206
M00055271A:C05	ES 204	562992	2053.I19.gz43_260270



Table 13

CloneID	ES No	ClusterID	SequenceName
M00055271B:C01	ES 204	553665	2053.I24.gz43_260350
M00055271B:D02	ES 204	446964	2053.J01.gz43_259983
M00055272D:E04	ES 204	559321	2053.K01.gz43_259984
M00055274B:A10	ES 204	562314	2053.K21.gz43_260304
M00055274C:C06	ES 204	558867	2053.L05.gz43_260049
M00055274C:F02	ES 204	452506	2053.L10.gz43_260129
M00055274C:F10	ES 204	557115	2053.L11.gz43_260145
M00055274D:A11	ES 204	560957	2053.L12.gz43_260161
M00055274D:B10	ES 204	549052	2053.L15.gz43_260209
M00055274D:C10	ES 204	558263	2053.L18.gz43_260257
M00055275B:H06	ES 204	558360	2053.M03.gz43_260018
M00055275D:E12	ES 204	560621	2053.M12.gz43_260162
M00055275D:G09	ES 204	362109	2053.M13.gz43_260178
M00055275D:H08	ES 204	562871	2053.M15.gz43_260210
M00055276B:C09	ES 204	560278	2053.M20.gz43_260290
M00055277D:A02	ES 204	555564	2053.N05.gz43_260051
M00055279A:E03	ES 204	551798	2053.O05.gz43_260052
M00055279B:D02	ES 204	480960	2053.O09.gz43_260116
M00055280A:C09	ES 204	560538	2053.O18.gz43_260260
M00055280C:G09	ES 204	560977	2053.P05.gz43_260053
M00055281A:E04	ES 204	558437	2053.P20.gz43_260293
M00055281A:F08	ES 204	558513	2053.P21.gz43_260309
M00055281B:D04	ES 204	481958	2053.P22.gz43_260325
M00055282A:A01	ES 204	559113	2054.A07.gz43_267326
M00055286A:H08	ES 204	559728	2054.C19.gz43_267520
M00055288B:D01	ES 204	559127	2054.E01.gz43_267234
M00055288B:D08	ES 204	399121	2054.E02.gz43_267250
M00055288C:A09	ES 205	549575	2054.E07.gz43_267330
M00055288D:A03	ES 205	558730	2054.E14.gz43_267442
M00055294B:C03	ES 205	484617	2054.H17.gz43_267493
M00055294B:D04	ES 205	559043	2054.H18.gz43_267509
M00055294B:G01	ES 205	559531	2054.H20.gz43_267541
M00055296A:C05	ES 205	561779	2054.I14.gz43_267446
M00055296C:E08	ES 205	558446	2054.I21.gz43_267558
M00055297A:C01	ES 205	558940	2054.I24.gz43_267606
M00055297D:C02	ES 205	500337	2054.J13.gz43_267431
M00055300A:B06	ES 205	551930	2054.K20.gz43_267544
M00055300C:F11	ES 205	559460	2054.L01.gz43_267241
M00055302B:B10	ES 205	624133	2054.M03.gz43_267274
M00055302B:F07	ES 205	561096	2054.M05.gz43_267306
M00055305C:D08	ES 205	560420	2054.O18.gz43_267516
M00055305D:F07	ES 205	448519	2054.O23.gz43_267596
M00055307B:G08	ES 205	451834	2054.P22.gz43_267581

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055308D:C09	ES 205	551811	2055.A23.gz43_267966
M00055308D:E10	ES 205	559965	2055.B01.gz43_267615
M00055310B:E02	ES 205	138470	2055.B20.gz43_267919
M00055312A:D11	ES 205	559112	2055.C08.gz43_267728
M00055312A:E10	ES 205	440707	2055.C09.gz43_267744
M00055312B:F01	ES 205	559452	2055.C15.gz43_267840
M00055312D:A09	ES 205	558813	2055.C23.gz43_267968
M00055313D:E10	ES 205	560369	2055.D17.gz43_267873
M00055314B:F03	ES 205	430146	2055.D22.gz43_267953
M00055314B:G07	ES 205	551912	2055.D23.gz43_267969
M00055315C:A09	ES 205	617813	2055.E13.gz43_267810
M00055316B:B10	ES 205	477757	2055.E22.gz43_267954
M00055317C:D04	ES 205	555359	2055.F12.gz43_267795
M00055319B:H06	ES 205	559794	2055.G19.gz43_267908
M00055319C:C03	ES 205	553709	2055.G22.gz43_267956
M00055319C:C07	ES 205	552857	2055.G23.gz43_267972
M00055320A:F04	ES 205	553986	2055.H09.gz43_267749
M00055320D:E09	ES 205	558105	2055.H20.gz43_267925
M00055321A:A04	ES 205	555200	2055.I01.gz43_267622
M00055321A:D11	ES 205	558161	2055.I03.gz43_267654
M00055321B:B10	ES 205	558890	2055.I05.gz43_267686
M00055321D:C12	ES 205	559027	2055.I13.gz43_267814
M00055322A:C08	ES 205	558254	2055.I23.gz43_267974
M00055322C:G11	ES 205	559574	2055.J04.gz43_267671
M00055322D:A01	ES 205	552673	2055.J05.gz43_267687
M00055322D:C12	ES 205	446900	2055.J07.gz43_267719
M00055323D:A12	ES 205	562236	2055.K01.gz43_267624
M00055324C:H10	ES 205	448677	2055.K13.gz43_267816
M00055324D:B02	ES 205	555277	2055.K15.gz43_267848
M00055325A:E12	ES 205	473343	2055.K21.gz43_267944
M00055325A:H02	ES 205	554585	2055.K22.gz43_267960
M00055330C:F05	ES 205	451118	2055.M20.gz43_267930
M00055330D:C05	ES 205	558980	2055.M22.gz43_267962
M00055330D:H12	ES 205	559776	2055.N01.gz43_267627
M00055333C:F12	ES 205	451429	2055.N22.gz43_267963
M00055333C:H07	ES 205	555349	2055.N23.gz43_267979
M00055334C:E11	ES 205	560538	2055.O16.gz43_267868
M00055334D:G07	ES 205	554176	2055.O21.gz43_267948
M00055335A:B06	ES 205	497493	2055.O24.gz43_267996
M00055335D:A03	ES 205	472188	2055.P12.gz43_267805
M00055336D:B03	ES 205	558562	2056.A04.gz43_268046
M00055337D:B10	ES 205	558867	2056.A15.gz43_268222
M00055338A:A02	ES 205	453004	2056.A16.gz43_268238
M00055338A:A03	ES 205	559971	2056.A17.gz43_268254

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055338A:H10	ES 205	561116	2056.A21.gz43_268318
M00055338B:F06	ES 205	560714	2056.A23.gz43_268350
M00055338C:F03	ES 205	551912	2056.B04.gz43_268047
M00055338C:G04	ES 205	552430	2056.B05.gz43_268063
M00055338C:H06	ES 205	561024	2056.B07.gz43_268095
M00055338D:E11	ES 205	512657	2056.B09.gz43_268127
M00055339A:B06	ES 205	560091	2056.B10.gz43_268143
M00055339B:D10	ES 205	562883	2056.B13.gz43_268191
M00055340B:C03	ES 205	449405	2056.C06.gz43_268080
M00055340B:E06	ES 205	560652	2056.C07.gz43_268096
M00055340C:D01	ES 205	560369	2056.C09.gz43_268128
M00055340D:D01	ES 205	560370	2056.C11.gz43_268160
M00055340D:F08	ES 205	560717	2056.C13.gz43_268192
M00055341B:A01	ES 205	558653	2056.C16.gz43_268240
M00055341B:C07	ES 205	560254	2056.C19.gz43_268288
M00055341C:C01	ES 205	560252	2056.C24.gz43_268368
M00055341C:F04	ES 205	627386	2056.D03.gz43_268033
M00055341C:G12	ES 205	552669	2056.D04.gz43_268049
M00055341D:H07	ES 205	552357	2056.D08.gz43_268113
M00055342A:E08	ES 205	562576	2056.D14.gz43_268209
M00055342B:C08	ES 205	403419	2056.D19.gz43_268289
M00055342C:E03	ES 205	496460	2056.D23.gz43_268353
M00055342C:H06	ES 205	561124	2056.E03.gz43_268034
M00055342D:B02	ES 205	163336	2056.E04.gz43_268050
M00055342D:F07	ES 205	627139	2056.E08.gz43_268114
M00055342D:H05	ES 205	561124	2056.E11.gz43_268162
M00055343A:C09	ES 205	560199	2056.E13.gz43_268194
M00055343A:D08	ES 205	560377	2056.E14.gz43_268210
M00055343A:G03	ES 205	560868	2056.E16.gz43_268242
M00055343C:B11	ES 205	400047	2056.E19.gz43_268290
M00055343C:G09	ES 205	560939	2056.E21.gz43_268322
M00055343C:G10	ES 205	560939	2056.E22.gz43_268338
M00055343D:C12	ES 205	560259	2056.F01.gz43_268003
M00055343D:G03	ES 205	560932	2056.F05.gz43_268067
M00055343D:G06	ES 205	554101	2056.F06.gz43_268083
M00055343D:H04	ES 205	559296	2056.F07.gz43_268099
M00055344A:G11	ES 205	448285	2056.F12.gz43_268179
M00055344B:A12	ES 205	618311	2056.F13.gz43_268195
M00055344C:C08	ES 205	491240	2056.F18.gz43_268275
M00055344C:E04	ES 205	557264	2056.F19.gz43_268291
M00055344C:F09	ES 205	558890	2056.F20.gz43_268307
M00055344C:H09	ES 205	559806	2056.F24.gz43_268371
M00055344D:A09	ES 205	550063	2056.G01.gz43_268004
M00055345A:D05	ES 205	559049	2056.G05.gz43_268068

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055345B:B03	ES 205	558769	2056.G06.gz43_268084
M00055345B:F03	ES 205	559375	2056.G09.gz43_268132
M00055345D:A04	ES 205	551305	2056.G16.gz43_268244
M00055345D:D01	ES 205	559087	2056.G18.gz43_268276
M00055345D:D12	ES 205	559093	2056.G19.gz43_268292
M00055345D:E02	ES 205	559246	2056.G20.gz43_268308
M00055345D:E05	ES 205	558334	2056.G21.gz43_268324
M00055346A:B01	ES 205	560088	2056.G24.gz43_268372
M00055346A:E12	ES 205	418482	2056.H03.gz43_268037
M00055346B:G03	ES 205	509505	2056.H08.gz43_268117
M00055347A:C03	ES 205	559004	2056.H16.gz43_268245
M00055347C:F01	ES 205	559359	2056.I04.gz43_268054
M00055348B:A02	ES 205	559963	2056.I17.gz43_268262
M00055348B:B05	ES 205	103123	2056.I18.gz43_268278
M00055348B:F05	ES 205	552258	2056.I22.gz43_268342
M00055348B:H05	ES 205	550973	2056.I23.gz43_268358
M00055348D:A01	ES 205	559857	2056.J04.gz43_268055
M00055349A:F07	ES 205	549041	2056.J11.gz43_268167
M00055349C:G07	ES 205	458618	2056.J19.gz43_268295
M00055349C:H12	ES 205	562849	2056.J20.gz43_268311
M00055349D:F02	ES 205	556011	2056.J24.gz43_268375
M00055350A:F01	ES 205	556216	2056.K06.gz43_268088
M00055350B:B12	ES 205	449927	2056.K09.gz43_268136
M00055350B:D09	ES 205	560695	2056.K11.gz43_268168
M00055350C:G11	ES 205	553875	2056.K15.gz43_268232
M00055351A:A08	ES 205	553505	2056.K21.gz43_268328
M00055351A:C09	ES 205	560311	2056.K22.gz43_268344
M00055351B:D11	ES 205	560498	2056.L01.gz43_268009
M00055351B:H12	ES 205	512014	2056.L02.gz43_268025
M00055352B:E01	ES 205	555095	2056.L24.gz43_268377
M00055352B:E06	ES 205	560544	2056.M01.gz43_268010
M00055352B:H05	ES 205	557372	2056.M04.gz43_268058
M00055352C:A07	ES 205	553591	2056.M06.gz43_268090
M00055353B:B09	ES 205	455379	2056.M13.gz43_268202
M00055353C:A05	ES 205	426698	2056.M18.gz43_268282
M00055353D:C05	ES 205	558959	2056.M24.gz43_268378
M00055354A:A01	ES 205	558182	2056.N04.gz43_268059
M00055354A:G11	ES 205	471712	2056.N11.gz43_268171
M00055354A:H08	ES 205	561068	2056.N12.gz43_268187
M00055354C:C12	ES 205	238146	2056.N16.gz43_268251
M00055354C:E01	ES 205	184995	2056.N17.gz43_268267
M00055354C:F04	ES 205	560805	2056.N18.gz43_268283
M00055355A:A10	ES 205	487623	2056.N23.gz43_268363
M00055355A:H04	ES 205	562719	2056.O02.gz43_268028

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055355C:A11	ES 205	559910	2056.O07.gz43_268108
M00055356A:B06	ES 205	471272	2056.O13.gz43_268204
M00055356A:D04	ES 205	626061	2056.O14.gz43_268220
M00055356A:D09	ES 205	556365	2056.O15.gz43_268236
M00055356B:B04	ES 205	549781	2056.O17.gz43_268268
M00055356C:H02	ES 205	561108	2056.P01.gz43_268013
M00055356D:C11	ES 205	560174	2056.P07.gz43_268109
M00055356D:G09	ES 205	549464	2056.P08.gz43_268125
M00055357A:A09	ES 205	449751	2056.P10.gz43_268157
M00055357B:A08	ES 205	554591	2056.P15.gz43_268237
M00055357B:B01	ES 205	448989	2056.P16.gz43_268253
M00055357B:B07	ES 205	551412	2056.P17.gz43_268269
M00055357C:H07	ES 205	492821	2056.P22.gz43_268349
M00055358A:F09	ES 205	627297	2065.A06.gz43_268462
M00055358B:C01	ES 205	561485	2065.A09.gz43_268510
M00055358D:G04	ES 205	465610	2065.A17.gz43_268638
M00055359B:F03	ES 205	559495	2065.A21.gz43_268702
M00055359B:G09	ES 205	559676	2065.A23.gz43_268734
M00055359B:H07	ES 205	491635	2065.A24.gz43_268750
M00055359C:H09	ES 205	501534	2065.B08.gz43_268495
M00055359D:C12	ES 205	451124	2065.B11.gz43_268543
M00055359D:H02	ES 205	559828	2065.B15.gz43_268607
M00055360C:C05	ES 205	495799	2065.C02.gz43_268400
M00055360C:F08	ES 205	471718	2065.C05.gz43_268448
M00055360C:G11	ES 205	456469	2065.C06.gz43_268464
M00055360D:H10	ES 205	449593	2065.C12.gz43_268560
M00055361A:C01	ES 205	559022	2065.C15.gz43_268608
M00055361B:F12	ES 205	553615	2065.C20.gz43_268688
M00055361B:G08	ES 205	559675	2065.C21.gz43_268704
M00055361C:E05	ES 205	562459	2065.C22.gz43_268720
M00055361D:C05	ES 205	558927	2065.D02.gz43_268401
M00055361D:H12	ES 205	559696	2065.D05.gz43_268449
M00055362C:B06	ES 205	558412	2065.D11.gz43_268545
M00055362C:G08	ES 205	559675	2065.D14.gz43_268593
M00055362C:H07	ES 205	484091	2065.D15.gz43_268609
M00055363A:C03	ES 205	556947	2065.D22.gz43_268721
M00055363A:D02	ES 205	32021	2065.D24.gz43_268753
M00055363A:F07	ES 205	550562	2065.E02.gz43_268402
M00055363C:E02	ES 205	91178	2065.E08.gz43_268498
M00055364B:B01	ES 205	558504	2065.E15.gz43_268610
M00055364B:D01	ES 205	463304	2065.E17.gz43_268642
M00055364B:E10	ES 205	559963	2065.E18.gz43_268658
M00055364C:B08	ES 205	534054	2065.E20.gz43_268690
M00055364D:E09	ES 205	636651	2065.F03.gz43_268419

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055365B:G10	ES 206	559919	2065.F09.gz43_268515
M00055365C:D12	ES 206	558334	2065.F11.gz43_268547
M00055365C:F11	ES 206	561825	2065.F13.gz43_268579
M00055366A:B04	ES 206	556850	2065.F15.gz43_268611
M00055366A:H08	ES 206	551551	2065.F17.gz43_268643
M00055366B:C04	ES 206	511746	2065.F20.gz43_268691
M00055366C:B11	ES 206	505971	2065.F23.gz43_268739
M00055366D:G10	ES 206	527410	2065.G07.gz43_268484
M00055367A:B11	ES 206	556430	2065.G12.gz43_268564
M00055367D:A05	ES 206	523606	2065.H02.gz43_268405
M00055368C:G06	ES 206	482515	2065.H21.gz43_268709
M00055368D:E03	ES 206	558813	2065.H23.gz43_268741
M00055369A:H08	ES 206	556959	2065.I07.gz43_268486
M00055369C:D04	ES 206	557783	2065.I09.gz43_268518
M00055370A:B03	ES 206	335714	2065.I17.gz43_268646
M00055370B:F07	ES 206	549163	2065.J02.gz43_268407
M00055370C:B08	ES 206	562280	2065.J05.gz43_268455
M00055370C:D02	ES 206	552031	2065.J06.gz43_268471
M00055370D:F06	ES 206	549984	2065.J12.gz43_268567
M00055370D:H07	ES 206	560959	2065.J13.gz43_268583
M00055370D:H12	ES 206	554885	2065.J14.gz43_268599
M00055371A:B05	ES 206	508515	2065.J15.gz43_268615
M00055371A:H10	ES 206	562027	2065.J18.gz43_268663
M00055371B:D01	ES 206	561610	2065.J19.gz43_268679
M00055371B:F01	ES 206	553705	2065.J21.gz43_268711
M00055371D:B08	ES 206	484748	2065.K05.gz43_268456
M00055372A:H02	ES 206	552265	2065.K11.gz43_268552
M00055372B:B02	ES 206	556357	2065.K13.gz43_268584
M00055372B:E01	ES 206	632260	2065.K14.gz43_268600
M00055372B:F11	ES 206	561868	2065.K18.gz43_268664
M00055372C:E03	ES 206	553904	2065.K22.gz43_268728
M00055372D:C11	ES 206	556416	2065.L04.gz43_268441
M00055372D:G11	ES 206	516008	2065.L09.gz43_268521
M00055373B:A09	ES 206	490308	2065.L14.gz43_268601
M00055373C:F05	ES 206	466887	2065.M01.gz43_268394
M00055373C:H03	ES 206	446890	2065.M02.gz43_268410
M00055373C:H10	ES 206	543323	2065.M03.gz43_268426
M00055373D:B08	ES 206	498509	2065.M04.gz43_268442
M00055374A:B11	ES 206	555796	2065.M11.gz43_268554
M00055374A:E01	ES 206	636876	2065.M13.gz43_268586
M00055374B:D05	ES 206	562565	2065.M19.gz43_268682
M00055374B:F06	ES 206	559764	2065.M21.gz43_268714
M00055374C:F01	ES 206	376726	2065.N04.gz43_268443

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055374D:C09	ES 206	504167	2065.N10.gz43_268539
M00055374D:F10	ES 206	558507	2065.N11.gz43_268555
M00055375B:H02	ES 206	482090	2065.N21.gz43_268715
M00055375B:H07	ES 206	555878	2065.N22.gz43_268731
M00055375C:C08	ES 206	448741	2065.N24.gz43_268763
M00055375C:F02	ES 206	143210	2065.O01.gz43_268396
M00055376A:A08	ES 206	561229	2065.O05.gz43_268460
M00055376B:A03	ES 206	474580	2065.O09.gz43_268524
M00055376B:A11	ES 206	561279	2065.O10.gz43_268540
M00055376B:B01	ES 206	453846	2065.O11.gz43_268556
M00055377A:B11	ES 206	207099	2065.O23.gz43_268748
M00055377B:E10	ES 206	562844	2065.P02.gz43_268413
M00055377C:G01	ES 206	461325	2065.P08.gz43_268509
M00055377C:H08	ES 206	450637	2065.P09.gz43_268525
M00055377D:F12	ES 206	562801	2065.P13.gz43_268589
M00055378A:B12	ES 206	235456	2065.P19.gz43_268685
M00055378D:B07	ES 206	559938	2066.A12.gz43_270570
M00055378D:D04	ES 206	562524	2066.A13.gz43_270586
M00055379A:D07	ES 206	468565	2066.A17.gz43_270650
M00055380A:C06	ES 206	448949	2066.B17.gz43_270651
M00055380D:H02	ES 206	562085	2066.C12.gz43_270572
M00055381A:F02	ES 206	549082	2066.C14.gz43_270604
M00055381B:C10	ES 206	562386	2066.C22.gz43_270732
M00055381C:G03	ES 206	562876	2066.D09.gz43_270525
M00055381D:D08	ES 206	560868	2066.D15.gz43_270621
M00055382B:E02	ES 206	493487	2066.D23.gz43_270749
M00055382C:D08	ES 206	558437	2066.E06.gz43_270478
M00055382C:H06	ES 206	446399	2066.E12.gz43_270574
M00055382D:C05	ES 206	562382	2066.E14.gz43_270606
M00055382D:D04	ES 206	459764	2066.E15.gz43_270622
M00055383A:F03	ES 206	562757	2066.E22.gz43_270734
M00055383B:H09	ES 206	551995	2066.F08.gz43_270511
M00055383C:A08	ES 206	562216	2066.F09.gz43_270527
M00055383D:F02	ES 206	498390	2066.F17.gz43_270655
M00055383D:G08	ES 206	454031	2066.F22.gz43_270735
M00055383D:H11	ES 206	559854	2066.F24.gz43_270767
M00055384A:F05	ES 206	562725	2066.G06.gz43_270480
M00055384B:D10	ES 206	562498	2066.G12.gz43_270576
M00055384C:G07	ES 206	562870	2066.G18.gz43_270672
M00055384D:H06	ES 206	550766	2066.G20.gz43_270704
M00055385C:C04	ES 206	549045	2066.H06.gz43_270481
M00055385C:F06	ES 206	561325	2066.H08.gz43_270513
M00055385C:G09	ES 206	450349	2066.H10.gz43_270545
M00055385D:D03	ES 206	418622	2066.H14.gz43_270609

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055386A:G05	ES 206	562849	2066.H21.gz43_270721
M00055386D:G02	ES 206	558297	2066.I11.gz43_270562
M00055386D:H04	ES 206	557247	2066.I12.gz43_270578
M00055387B:H12	ES 206	550829	2066.I22.gz43_270738
M00055388A:A09	ES 206	553244	2066.J08.gz43_270515
M00055388A:B06	ES 206	560948	2066.J09.gz43_270531
M00055388B:B02	ES 206	465836	2066.J13.gz43_270595
M00055388B:E01	ES 206	636532	2066.J17.gz43_270659
M00055388B:H04	ES 206	557249	2066.J20.gz43_270707
M00055388C:D01	ES 206	635965	2066.J22.gz43_270739
M00055388D:A01	ES 206	555681	2066.J24.gz43_270771
M00055388D:F11	ES 206	556793	2066.K10.gz43_270548
M00055389A:D08	ES 206	238196	2066.K14.gz43_270612
M00055389C:F12	ES 206	282015	2066.K24.gz43_270772
M00055390A:A05	ES 206	515115	2066.L06.gz43_270485
M00055390C:E06	ES 206	50604	2066.L18.gz43_270677
M00055391B:D05	ES 206	499690	2066.M10.gz43_270550
M00055391B:D07	ES 206	453508	2066.M11.gz43_270566
M00055391B:H07	ES 206	418921	2066.M14.gz43_270614
M00055391B:H08	ES 206	555639	2066.M15.gz43_270630
M00055392A:H06	ES 206	446242	2066.N03.gz43_270439
M00055392C:G07	ES 206	551640	2066.N11.gz43_270567
M00055392D:A06	ES 206	562701	2066.N13.gz43_270599
M00055393B:F04	ES 206	44015	2066.N23.gz43_270759
M00055393C:B02	ES 206	549889	2066.N24.gz43_270775
M00055394B:C06	ES 206	561457	2066.O13.gz43_270600
M00055394B:D08	ES 206	556011	2066.O15.gz43_270632
M00055394D:F03	ES 206	554908	2066.P07.gz43_270505
M00055395A:C02	ES 206	446531	2066.P09.gz43_270537
M00055395A:E09	ES 206	452808	2066.P13.gz43_270601
M00055395B:C04	ES 206	561487	2066.P17.gz43_270665
M00055396B:C06	ES 206	560003	2067.A11.gz43_270938
M00055396B:G02	ES 206	561922	2067.A14.gz43_270986
M00055397A:B10	ES 206	562236	2067.A23.gz43_271130
M00055397A:C06	ES 206	154980	2067.A24.gz43_271146
M00055397A:H07	ES 206	556380	2067.B06.gz43_270859
M00055397B:F12	ES 206	562736	2067.B08.gz43_270891
M00055397D:A01	ES 206	562147	2067.B12.gz43_270955
M00055398A:C11	ES 206	561438	2067.B20.gz43_271083
M00055398B:A05	ES 206	469852	2067.B21.gz43_271099
M00055398B:C05	ES 206	456687	2067.B23.gz43_271131
M00055398C:A11	ES 206	555882	2067.B24.gz43_271147
M00055398C:D01	ES 206	448511	2067.C02.gz43_270796
M00055398C:F07	ES 206	511792	2067.C06.gz43_270860



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CloneID	ES No	ClusterID	SequenceName
M00055399C:A08	ES 206	513715	2067.C21.gz43_271100
M00055400B:H12	ES 206	562029	2067.D19.gz43_271069
M00055400D:G01	ES 206	556382	2067.E04.gz43_270830
M00055401A:C08	ES 206	449258	2067.E06.gz43_270862
M00055401D:E03	ES 206	551731	2067.E21.gz43_271102
M00055402A:A05	ES 206	561206	2067.F02.gz43_270799
M00055402A:H03	ES 206	98869	2067.F06.gz43_270863
M00055402C:C12	ES 206	551928	2067.F22.gz43_271119
M00055402D:A11	ES 206	486834	2067.G02.gz43_270800
M00055402D:H04	ES 206	562059	2067.G06.gz43_270864
M00055403A:C07	ES 206	555856	2067.G11.gz43_270944
M00055403B:A05	ES 206	490060	2067.G16.gz43_271024
M00055403B:A10	ES 206	558180	2067.G18.gz43_271056
M00055403B:D04	ES 206	555726	2067.G21.gz43_271104
M00055403B:D07	ES 206	553173	2067.G22.gz43_271120
M00055403B:G09	ES 206	551675	2067.G23.gz43_271136
M00055403B:G12	ES 206	561236	2067.G24.gz43_271152
M00055404A:B10	ES 206	561325	2067.H10.gz43_270929
M00055404A:D08	ES 206	553766	2067.H12.gz43_270961
M00055404C:C11	ES 206	530715	2067.H23.gz43_271137
M00055405A:A02	ES 206	561236	2067.I05.gz43_270850
M00055405A:C01	ES 206	452761	2067.I06.gz43_270866
M00055405A:G11	ES 206	419489	2067.I07.gz43_270882
M00055405B:H05	ES 206	554742	2067.I10.gz43_270930
M00055405B:H06	ES 206	473617	2067.I11.gz43_270946
M00055405C:C04	ES 206	63669	2067.I13.gz43_270978
M00055405C:H07	ES 206	559102	2067.I14.gz43_270994
M00055405D:G05	ES 206	551617	2067.I20.gz43_271090
M00055406B:E07	ES 206	562584	2067.J05.gz43_270851
M00055406B:F10	ES 206	562369	2067.J07.gz43_270883
M00055406D:A03	ES 206	491260	2067.J13.gz43_270979
M00055406D:C10	ES 206	487893	2067.J16.gz43_271027
M00055406D:G12	ES 206	557853	2067.J18.gz43_271059
M00055407A:F08	ES 206	465828	2067.J24.gz43_271155
M00055407B:G07	ES 206	550730	2067.K02.gz43_270804
M00055407C:E04	ES 206	465284	2067.K06.gz43_270868
M00055407C:G04	ES 206	556105	2067.K08.gz43_270900
M00055407C:G11	ES 206	560252	2067.K09.gz43_270916
M00055408A:A05	ES 206	561212	2067.K15.gz43_271012
M00055408A:F12	ES 206	66014	2067.K23.gz43_271140
M00055408A:G09	ES 206	446650	2067.L01.gz43_270789
M00055408B:G04	ES 206	447800	2067.L08.gz43_270901
M00055408C:C04	ES 206	451938	2067.L11.gz43_270949
M00055408C:E04	ES 206	559776	2067.L13.gz43_270981

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055408D:E05	ES 206	548939	2067.L17.gz43_271045
M00055408D:E11	ES 206	558720	2067.L18.gz43_271061
M00055409A:E06	ES 206	100821	2067.L23.gz43_271141
M00055409A:E10	ES 206	516043	2067.L24.gz43_271157
M00055410C:G08	ES 206	550135	2067.N05.gz43_270855
M00055410C:H11	ES 206	562001	2067.N08.gz43_270903
M00055410D:B02	ES 206	288626	2067.N09.gz43_270919
M00055410D:G01	ES 206	633189	2067.N11.gz43_270951
M00055411A:H04	ES 206	558583	2067.N16.gz43_271031
M00055411B:D12	ES 206	356058	2067.N22.gz43_271127
M00055411C:E02	ES 206	450060	2067.O03.gz43_270824
M00055412A:C05	ES 206	440833	2067.O14.gz43_271000
M00055412A:F09	ES 206	556734	2067.O15.gz43_271016
M00055412B:A07	ES 206	495958	2067.O16.gz43_271032
M00055412D:A12	ES 206	560838	2067.P03.gz43_270825
M00055413A:A02	ES 206	540000	2067.P07.gz43_270889
M00055413C:B09	ES 206	446171	2067.P19.gz43_271081
M00042583D:F03	ES 207	452204	2078.A10.gz43_269168
M00042583D:F11	ES 207	506901	2078.A11.gz43_269184
M00042586B:A04	ES 207	451722	2078.A22.gz43_269360
M00042586B:A09	ES 207	451933	2078.A23.gz43_269376
M00042586B:A10	ES 207	448453	2078.A24.gz43_269392
M00042586C:E01	ES 207	451923	2078.B03.gz43_269057
M00042586D:C07	ES 207	451868	2078.B06.gz43_269105
M00042587B:G07	ES 207	452260	2078.B09.gz43_269153
M00042588A:G10	ES 207	508088	2078.B16.gz43_269265
M00042588C:E07	ES 207	505858	2078.B19.gz43_269313
M00042589A:G06	ES 207	452236	2078.B21.gz43_269345
M00042589B:D04	ES 207	504007	2078.B22.gz43_269361
M00042589B:E03	ES 207	452066	2078.B23.gz43_269377
M00042589D:D08	ES 207	415825	2078.C08.gz43_269138
M00042589D:F02	ES 207	452182	2078.C09.gz43_269154
M00042590B:G02	ES 207	507349	2078.C11.gz43_269186
M00042590C:C09	ES 207	418340	2078.C12.gz43_269202
M00042621B:G01	ES 207	452257	2078.C16.gz43_269266
M00042621D:A03	ES 207	501401	2078.C19.gz43_269314
M00042622C:H12	ES 207	452315	2078.D03.gz43_269059
M00042623B:B09	ES 207	451802	2078.D06.gz43_269107
M00042623D:C02	ES 207	447210	2078.D09.gz43_269155
M00042624D:B05	ES 207	452462	2078.D14.gz43_269235
M00042625B:H10	ES 207	517247	2078.D20.gz43_269331
M00042625D:C07	ES 207	511746	2078.E06.gz43_269108
M00042625D:E08	ES 207	513888	2078.E07.gz43_269124

Table 13

CloneID	ES No	ClusterID	SequenceName
M00042626B:A12	ES 207	452432	2078.E10.gz43_269172
M00042626D:D12	ES 207	452031	2078.E16.gz43_269268
M00042627B:A10	ES 207	452376	2078.E18.gz43_269300
M00042628B:G11	ES 207	451401	2078.F04.gz43_269077
M00042628C:G10	ES 207	516522	2078.F06.gz43_269109
M00042628D:F12	ES 207	447904	2078.F08.gz43_269141
M00042629A:E11	ES 207	452052	2078.F11.gz43_269189
M00042630B:C04	ES 207	451885	2078.F20.gz43_269333
M00042630C:C12	ES 207	503499	2078.F22.gz43_269365
M00042951D:C05	ES 207	451841	2078.G05.gz43_269094
M00042952A:H12	ES 207	452324	2078.G10.gz43_269174
M00042952B:A08	ES 207	500853	2078.G11.gz43_269190
M00042952B:C08	ES 207	451887	2078.G12.gz43_269206
M00042952C:H09	ES 207	452323	2078.G16.gz43_269270
M00042953B:D02	ES 207	504560	2078.H01.gz43_269031
M00042954A:F04	ES 207	452142	2078.H12.gz43_269207
M00042954D:D04	ES 207	451993	2078.H18.gz43_269303
M00042955D:C02	ES 207	502815	2078.I02.gz43_269048
M00042955D:H03	ES 207	448594	2078.I04.gz43_269080
M00042956A:H02	ES 207	448090	2078.I05.gz43_269096
M00042957A:D06	ES 207	451994	2078.I12.gz43_269208
M00042957D:C09	ES 207	451929	2078.I18.gz43_269304
M00042958B:H04	ES 207	452981	2078.J02.gz43_269049
M00042958C:D04	ES 207	512721	2078.J03.gz43_269065
M00042958C:G10	ES 207	516018	2078.J04.gz43_269081
M00042959A:B07	ES 207	423578	2078.J06.gz43_269113
M00042959A:E08	ES 207	514142	2078.J08.gz43_269145
M00042959B:E11	ES 207	514160	2078.J11.gz43_269193
M00042959C:C06	ES 207	452615	2078.J12.gz43_269209
M00042959D:A05	ES 207	510169	2078.J14.gz43_269241
M00042960A:B10	ES 207	448332	2078.J17.gz43_269289
M00042960D:C11	ES 207	512051	2078.K03.gz43_269066
M00042962A:G04	ES 207	452899	2078.K12.gz43_269210
M00042962B:A03	ES 207	446438	2078.K13.gz43_269226
M00042962C:D05	ES 207	513155	2078.K16.gz43_269274
M00042962D:B09	ES 207	511351	2078.K18.gz43_269306
M00042963B:A02	ES 207	452459	2078.K23.gz43_269386
M00042963B:E12	ES 207	514594	2078.L02.gz43_269051
M00042963D:F11	ES 207	452801	2078.L07.gz43_269131
M00042964C:D06	ES 207	513156	2078.L16.gz43_269275
M00042964C:D10	ES 207	513168	2078.L17.gz43_269291
M00042964D:C02	ES 207	512059	2078.L21.gz43_269355
M00042965A:B03	ES 207	452506	2078.L23.gz43_269387
M00042965A:G02	ES 207	516415	2078.M01.gz43_269036

Table 13

CloneID	ES No	ClusterID	SequenceName
M00042965B:G08	ES 207	452898	2078.M04.gz43_269084
M00042965C:A05	ES 207	452454	2078.M06.gz43_269116
M00042965C:E06	ES 207	452775	2078.M07.gz43_269132
M00042967A:E06	ES 207	513585	2078.M18.gz43_269308
M00042969B:E01	ES 207	505679	2078.N04.gz43_269085
M00042969B:G10	ES 207	452279	2078.N05.gz43_269101
M00042970D:D02	ES 207	452695	2078.N16.gz43_269277
M00042971A:B09	ES 207	510717	2078.N17.gz43_269293
M00042971A:D12	ES 207	452662	2078.N19.gz43_269325
M00042972C:F07	ES 207	451618	2078.O04.gz43_269086
M00042972C:F09	ES 207	373239	2078.O05.gz43_269102
M00042973B:B10	ES 207	452500	2078.O09.gz43_269166
M00042974D:B07	ES 207	456545	2078.O17.gz43_269294
M00042975C:A08	ES 207	450805	2078.O21.gz43_269358
M00042975D:G07	ES 207	453124	2078.P01.gz43_269039
M00042976B:F05	ES 207	506920	2078.P03.gz43_269071
M00042978B:F03	ES 207	452833	2078.P17.gz43_269295
M00042978D:E02	ES 207	27534	2078.P20.gz43_269343
M00042982C:G02	ES 207	448687	2079.A18.gz43_271818
M00042983A:E09	ES 207	504880	2079.A22.gz43_271882
M00042983D:A03	ES 207	456756	2079.B06.gz43_271627
M00042985B:C05	ES 207	448200	2079.B14.gz43_271755
M00042985B:F05	ES 207	506372	2079.B15.gz43_271771
M00042985C:B03	ES 207	451811	2079.B16.gz43_271787
M00042985C:D02	ES 207	504501	2079.B17.gz43_271803
M00042985C:D04	ES 207	451491	2079.B18.gz43_271819
M00042986B:E06	ES 207	447445	2079.B22.gz43_271883
M00042986C:B07	ES 207	501534	2079.B24.gz43_271915
M00042987C:E04	ES 207	505226	2079.C06.gz43_271628
M00042988D:G10	ES 207	452220	2079.C13.gz43_271740
M00042989C:A06	ES 207	510254	2079.C15.gz43_271772
M00042989C:B07	ES 207	511348	2079.C16.gz43_271788
M00042989D:A07	ES 207	509505	2079.C20.gz43_271852
M00042990A:E05	ES 207	448813	2079.C21.gz43_271868
M00042990B:A08	ES 207	500795	2079.C23.gz43_271900
M00042991B:G01	ES 207	452874	2079.D05.gz43_271613
M00042991C:C02	ES 207	238196	2079.D06.gz43_271629
M00042991D:C09	ES 207	452603	2079.D09.gz43_271677
M00042991D:F06	ES 207	452830	2079.D12.gz43_271725
M00042992B:B03	ES 207	451812	2079.D15.gz43_271773
M00042992B:B11	ES 207	502343	2079.D16.gz43_271789
M00042992D:H02	ES 207	75212	2079.D19.gz43_271837
M00042993A:D12	ES 207	513178	2079.D21.gz43_271869
M00042993B:C12	ES 207	446520	2079.D23.gz43_271901

Table 13

CloneID	ES No	ClusterID	SequenceName
M00042994C:C09	ES 207	503628	2079.E05.gz43_271614
M00042995C:E04	ES 207	455716	2079.E11.gz43_271710
M00042996D:D12	ES 207	453804	2079.E21.gz43_271870
M00042997B:B07	ES 207	451806	2079.E23.gz43_271902
M00042999A:D01	ES 207	403634	2079.F07.gz43_271647
M00043000C:H06	ES 207	509027	2079.F14.gz43_271759
M00055413C:G09	ES 207	556126	2067.P21.gz43_271113
M00055414C:C02	ES 207	456520	2068.A13.gz43_271354
M00055414D:G10	ES 207	482425	2068.A21.gz43_271482
M00055415D:C12	ES 207	561500	2068.B15.gz43_271387
M00055415D:E10	ES 207	204557	2068.B17.gz43_271419
M00055416A:C04	ES 207	561497	2068.B21.gz43_271483
M00055416B:F11	ES 207	561770	2068.C07.gz43_271260
M00055416D:B03	ES 207	562477	2068.C12.gz43_271340
M00055416D:D11	ES 207	558679	2068.C14.gz43_271372
M00055416D:H11	ES 207	555880	2068.C18.gz43_271436
M00055417A:G11	ES 207	131130	2068.C21.gz43_271484
M00055417C:A05	ES 207	550166	2068.D04.gz43_271213
M00055417C:G03	ES 207	561112	2068.D05.gz43_271229
M00055417D:D08	ES 207	557760	2068.D08.gz43_271277
M00055417D:H08	ES 207	470667	2068.D10.gz43_271309
M00055418A:C12	ES 207	561454	2068.D12.gz43_271341
M00055418A:E07	ES 207	561682	2068.D15.gz43_271389
M00055418A:F03	ES 207	560252	2068.D16.gz43_271405
M00055418A:H04	ES 207	554774	2068.D17.gz43_271421
M00055418C:D08	ES 207	418562	2068.E05.gz43_271230
M00055418D:A03	ES 207	552561	2068.E10.gz43_271310
M00055418D:B05	ES 207	630348	2068.E11.gz43_271326
M00055419D:D04	ES 207	561646	2068.F04.gz43_271215
M00055419D:H07	ES 207	550018	2068.F09.gz43_271295
M00055420A:E12	ES 207	561707	2068.F14.gz43_271375
M00055420A:F01	ES 207	558958	2068.F15.gz43_271391
M00055420C:E08	ES 207	524736	2068.F22.gz43_271503
M00055421A:A09	ES 207	556793	2068.G10.gz43_271312
M00055421B:E05	ES 207	58680	2068.G22.gz43_271504
M00055421C:F06	ES 207	561837	2068.H09.gz43_271297
M00055421C:G07	ES 207	491728	2068.H11.gz43_271329
M00055421D:G11	ES 207	559884	2068.H16.gz43_271409
M00055422B:B01	ES 207	554489	2068.H22.gz43_271505
M00055422C:E10	ES 207	554028	2068.I09.gz43_271298
M00055422D:E12	ES 207	631966	2068.I12.gz43_271346
M00055423A:A10	ES 207	561180	2068.I14.gz43_271378
M00055423A:D02	ES 207	560118	2068.I15.gz43_271394
M00055423A:G08	ES 207	449356	2068.I16.gz43_271410

Table 13

CloneID	ES No	ClusterID	SequenceName
M00055423B:A06	ES 207	553987	2068.I17.gz43_271426
M00055423C:C11	ES 207	559514	2068.J04.gz43_271219
M00055423C:D05	ES 207	559385	2068.J05.gz43_271235
M00055424A:A08	ES 207	556511	2068.J12.gz43_271347
M00055424A:C10	ES 207	492982	2068.J13.gz43_271363
M00055424A:F04	ES 207	512392	2068.J15.gz43_271395
M00055424A:F06	ES 207	48977	2068.J16.gz43_271411
M00055424B:D04	ES 207	559380	2068.K01.gz43_271172
M00055425A:H03	ES 207	554953	2068.K14.gz43_271380
M00055425B:D12	ES 207	561645	2068.K17.gz43_271428
M00055425B:F06	ES 207	493410	2068.K20.gz43_271476
M00055471C:A06	ES 207	412282	2068.L13.gz43_271365
M00055471C:B01	ES 207	492876	2068.L14.gz43_271381
M00055471C:D04	ES 207	447098	2068.L16.gz43_271413
M00055472A:B12	ES 207	561411	2068.M05.gz43_271238
M00055472A:F02	ES 207	468672	2068.M08.gz43_271286
M00055472A:H01	ES 207	551166	2068.M09.gz43_271302
M00055472C:G11	ES 207	549511	2068.M18.gz43_271446
M00055472D:H09	ES 207	562017	2068.N03.gz43_271207
M00055473B:D01	ES 207	556490	2068.N08.gz43_271287
M00055473B:E10	ES 207	561718	2068.N10.gz43_271319
M00055473C:A05	ES 207	559076	2068.N12.gz43_271351
M00055473C:E06	ES 207	554181	2068.N15.gz43_271399
M00055473C:H05	ES 207	522220	2068.N16.gz43_271415
M00055473D:E01	ES 207	561753	2068.N20.gz43_271479
M00055474A:B05	ES 207	562302	2068.N22.gz43_271511
M00055474A:G06	ES 207	449795	2068.O03.gz43_271208
M00055474B:G02	ES 207	486512	2068.O09.gz43_271304
M00055474C:H12	ES 207	555933	2068.O14.gz43_271384
M00055474D:E07	ES 207	268197	2068.O18.gz43_271448
M00055475D:A05	ES 207	417426	2068.P12.gz43_271353
M00055475D:A10	ES 207	562137	2068.P14.gz43_271385
M00055475D:B07	ES 207	453715	2068.P16.gz43_271417
M00055475D:G08	ES 207	560700	2068.P18.gz43_271449
M00042611A:A01	ES 208	449068	2089.A01.gz43_269708
M00042612A:B06	ES 208	405102	2089.A06.gz43_269788
M00042613A:H01	ES 208	453783	2089.A15.gz43_269932
M00042613C:F06	ES 208	453783	2089.A18.gz43_269980
M00042614A:C04	ES 208	520074	2089.A22.gz43_270044
M00042614A:H02	ES 208	524157	2089.A23.gz43_270060
M00042614C:B09	ES 208	447446	2089.A24.gz43_270076
M00042614D:A12	ES 208	453220	2089.B03.gz43_269741
M00042616A:D03	ES 208	527590	2089.B10.gz43_269853

Table 13

CloneID	ES No	ClusterID	SequenceName
M00042617C:B07	ES 208	453385	2089.B20.gz43_270013
M00042618B:G04	ES 208	453893	2089.C03.gz43_269742
M00043001A:C10	ES 208	451850	2079.F16.gz43_271791
M00043001B:C01	ES 208	503122	2079.F17.gz43_271807
M00043001B:E02	ES 208	452969	2079.F18.gz43_271823
M00043001B:H01	ES 208	452325	2079.F19.gz43_271839
M00043001C:C03	ES 208	451891	2079.F20.gz43_271855
M00043002A:G09	ES 208	507450	2079.F23.gz43_271903
M00043002B:E06	ES 208	454849	2079.F24.gz43_271919
M00043003A:H07	ES 208	452976	2079.G11.gz43_271712
M00043003C:A02	ES 208	452392	2079.G15.gz43_271776
M00043003C:G10	ES 208	452866	2079.G18.gz43_271824
M00043003D:D10	ES 208	455132	2079.G20.gz43_271856
M00043004A:C08	ES 208	503625	2079.G22.gz43_271888
M00043004A:C10	ES 208	448381	2079.G23.gz43_271904
M00043005A:B06	ES 208	452504	2079.H06.gz43_271633
M00043007B:D12	ES 208	366607	2079.H24.gz43_271921
M00043007D:F07	ES 208	452186	2079.I05.gz43_271618
M00043008D:E12	ES 208	504812	2079.I15.gz43_271778
M00043008D:H09	ES 208	508126	2079.I17.gz43_271810
M00043009B:C09	ES 208	502984	2079.I19.gz43_271842
M00043009B:F11	ES 208	452160	2079.I20.gz43_271858
M00043010B:B02	ES 208	451794	2079.J09.gz43_271683
M00043011B:D03	ES 208	504431	2079.J15.gz43_271779
M00043011C:H09	ES 208	508125	2079.J19.gz43_271843
M00043011D:C12	ES 208	502614	2079.J22.gz43_271891
M00043012A:E02	ES 208	452110	2079.K03.gz43_271588
M00043012A:F06	ES 208	453572	2079.K04.gz43_271604
M00043012D:A06	ES 208	449510	2079.K10.gz43_271700
M00043013B:A06	ES 208	500896	2079.K13.gz43_271748
M00043013C:A01	ES 208	455117	2079.K16.gz43_271796
M00043013D:F03	ES 208	455621	2079.K18.gz43_271828
M00043014B:G12	ES 208	454226	2079.K22.gz43_271892
M00043014C:F07	ES 208	505933	2079.K23.gz43_271908
M00043014C:G06	ES 208	507066	2079.K24.gz43_271924
M00043017D:B06	ES 208	455855	2079.L13.gz43_271749
M00043020A:A03	ES 208	452440	2079.L15.gz43_271781
M00043020A:G12	ES 208	452922	2079.L16.gz43_271797
M00043021A:A09	ES 208	452445	2079.L18.gz43_271829
M00043021A:B06	ES 208	452528	2079.L19.gz43_271845
M00043021A:C04	ES 208	454286	2079.L20.gz43_271861
M00043021A:H06	ES 208	453078	2079.L21.gz43_271877
M00043021B:H03	ES 208	452973	2079.L22.gz43_271893
M00043021D:F10	ES 208	514824	2079.M01.gz43_271558

Table 13

CloneID	ES No	ClusterID	SequenceName
M00043022D:A07	ES 208	500622	2079.M06.gz43_271638
M00043023D:D06	ES 208	513381	2079.M13.gz43_271750
M00043024B:H11	ES 208	453079	2079.M20.gz43_271862
M00043025A:C01	ES 208	456755	2079.M22.gz43_271894
M00043025A:D09	ES 208	452648	2079.M23.gz43_271910
M00043026D:D06	ES 208	452031	2079.N11.gz43_271719
M00043027B:C04	ES 208	452618	2079.N14.gz43_271767
M00043027D:G12	ES 208	452873	2079.N18.gz43_271831
M00043028B:F08	ES 208	454487	2079.N21.gz43_271879
M00043028C:H09	ES 208	453038	2079.N23.gz43_271911
M00043029A:E11	ES 208	452759	2079.O05.gz43_271624
M00043029B:C09	ES 208	512432	2079.O07.gz43_271656
M00043029B:F09	ES 208	269927	2079.O09.gz43_271688
M00043029B:G10	ES 208	516799	2079.O10.gz43_271704
M00043029C:D01	ES 208	448550	2079.O11.gz43_271720
M00043030C:B11	ES 208	452501	2079.O21.gz43_271880
M00043030C:F03	ES 208	515127	2079.O22.gz43_271896
M00043030D:G03	ES 208	449242	2079.P01.gz43_271561
M00043031A:B01	ES 208	452523	2079.P02.gz43_271577
M00043032B:H01	ES 208	452957	2079.P11.gz43_271721
M00043033C:C05	ES 208	452611	2079.P21.gz43_271881
M00043033C:D05	ES 208	452611	2079.P23.gz43_271913
M00043075A:B12	ES 208	519109	2089.C14.gz43_269918
M00043076A:A09	ES 208	518566	2089.C22.gz43_270046
M00043077B:H01	ES 208	448985	2089.D07.gz43_269807
M00043077D:E12	ES 208	417549	2089.D09.gz43_269839
M00043077D:F04	ES 208	522648	2089.D10.gz43_269855
M00043078C:C04	ES 208	519641	2089.D14.gz43_269919
M00043078C:H05	ES 208	523732	2089.D16.gz43_269951
M00043079C:D08	ES 208	453554	2089.D19.gz43_269999
M00043079D:G10	ES 208	523182	2089.E01.gz43_269712
M00043080A:C03	ES 208	451583	2089.E02.gz43_269728
M00043080B:B05	ES 208	453297	2089.E03.gz43_269744
M00043080B:C11	ES 208	519988	2089.E04.gz43_269760
M00043081D:A10	ES 208	446614	2089.E09.gz43_269840
M00043082D:B05	ES 208	454562	2089.E17.gz43_269968
M00043085C:A03	ES 208	453160	2089.E24.gz43_270080
M00043086A:C02	ES 208	453470	2089.F03.gz43_269745
M00043086D:B09	ES 208	453248	2089.F08.gz43_269825
M00043087B:D10	ES 208	449430	2089.F13.gz43_269905
M00043088B:D07	ES 208	395536	2089.F16.gz43_269953
M00043089A:D06	ES 208	520616	2089.F21.gz43_270033
M00043090B:H06	ES 208	524470	2089.F24.gz43_270081
M00043090D:H07	ES 208	524478	2089.G03.gz43_269746



Table 13

CloneID	ES No	ClusterID	SequenceName
M00043091C:H05	ES 208	530656	2089.G07.gz43_269810
M00043091C:H08	ES 208	454910	2089.G08.gz43_269826
M00043091D:C01	ES 208	454374	2089.G09.gz43_269842
M00043091D:F03	ES 208	402242	2089.G11.gz43_269874
M00043092D:D06	ES 208	454531	2089.G18.gz43_269986
M00043093A:A06	ES 208	454177	2089.G20.gz43_270018
M00043093D:F12	ES 208	454701	2089.H02.gz43_269731
M00043094A:F01	ES 208	529219	2089.H03.gz43_269747
M00043094C:A12	ES 208	525023	2089.H06.gz43_269795
M00043096A:B02	ES 208	449202	2089.H12.gz43_269891
M00043096A:E01	ES 208	528134	2089.H13.gz43_269907
M00043096C:D02	ES 208	454509	2089.H16.gz43_269955
M00043096C:H04	ES 208	451972	2089.H17.gz43_269971
M00043097A:D11	ES 208	527873	2089.H21.gz43_270035
M00043097A:F06	ES 208	387530	2089.H22.gz43_270051
M00043097D:B12	ES 208	454226	2089.I02.gz43_269732
M00043100C:D08	ES 208	453533	2089.I15.gz43_269940
M00043100D:C12	ES 208	520057	2089.I17.gz43_269972
M00043101A:F12	ES 208	522548	2089.I20.gz43_270020
M00043101C:F12	ES 208	453846	2089.I22.gz43_270052
M00043102A:B10	ES 208	453364	2089.J01.gz43_269717
M00043102A:G12	ES 208	523590	2089.J04.gz43_269765
M00043102B:F05	ES 208	453761	2089.J05.gz43_269781
M00043102D:C05	ES 208	446728	2089.J09.gz43_269845
M00043102D:F11	ES 208	453766	2089.J11.gz43_269877
M00043103A:G05	ES 208	449335	2089.J12.gz43_269893
M00043104B:C09	ES 208	453494	2089.J20.gz43_270021
M00043105A:F02	ES 208	453809	2089.K01.gz43_269718
M00043106B:F07	ES 208	450287	2089.K11.gz43_269878
M00043106C:D05	ES 208	453572	2089.K12.gz43_269894
M00043107A:E07	ES 208	453726	2089.K17.gz43_269974
M00043107D:H04	ES 208	450566	2089.K21.gz43_270038
M00043108B:A01	ES 208	453132	2089.K23.gz43_270070
M00043108B:D12	ES 208	453549	2089.L01.gz43_269719
M00043109C:F04	ES 208	454720	2089.L06.gz43_269799
M00043131B:A11	ES 208	454134	2089.L07.gz43_269815
M00043131B:G10	ES 208	454825	2089.L11.gz43_269879
M00043131C:A11	ES 208	451391	2089.L13.gz43_269911
M00043131D:B02	ES 208	525719	2089.L15.gz43_269943
M00043132C:D02	ES 208	454483	2089.L22.gz43_270055
M00043134C:D06	ES 208	454518	2089.M09.gz43_269848
M00043135C:E07	ES 208	454550	2089.M12.gz43_269896
M00043135D:A11	ES 208	454126	2089.M13.gz43_269912
M00043135D:C07	ES 208	526575	2089.M14.gz43_269928

Table 13

CloneID	ES No	ClusterID	SequenceName
M00043136A:D03	ES 208	527361	2089.M17.gz43_269976
M00043137C:D02	ES 208	452936	2089.N04.gz43_269769
M00043137D:D10	ES 208	454438	2089.N06.gz43_269801
M00043138A:H03	ES 208	523753	2089.N09.gz43_269849
M00043138B:B08	ES 208	407275	2089.N10.gz43_269865
M00043138B:F02	ES 208	93125	2089.N12.gz43_269897
M00043138B:G11	ES 208	437064	2089.N13.gz43_269913
M00043138C:D09	ES 208	449394	2089.N15.gz43_269945
M00043139C:A05	ES 208	524622	2089.N23.gz43_270073
M00043139D:A06	ES 208	524624	2089.O02.gz43_269738
M00043140C:D03	ES 208	527446	2089.O04.gz43_269770
M00043140C:H11	ES 208	530919	2089.O07.gz43_269818
M00043141C:C12	ES 208	415326	2089.O10.gz43_269866
M00043141D:A12	ES 208	454129	2089.O13.gz43_269914
M00043144D:H01	ES 208	454050	2089.P03.gz43_269755
M00043146C:D10	ES 208	520595	2089.P09.gz43_269851
M00043146C:F10	ES 208	453756	2089.P10.gz43_269867
M00043146D:H03	ES 208	455941	2089.P13.gz43_269915
M00043147D:H03	ES 208	524363	2089.P15.gz43_269947
M00043148C:E01	ES 208	453692	2089.P17.gz43_269979
M00043149B:A01	ES 208	453202	2089.P20.gz43_270027
M00043149D:F02	ES 208	522220	2090.A03.gz43_273939
M00043150A:B12	ES 208	518949	2090.A04.gz43_273955
M00043151B:D02	ES 208	454460	2090.A12.gz43_274083
M00043152A:F10	ES 208	454731	2090.A17.gz43_274163
M00043152A:G08	ES 208	456723	2090.A18.gz43_274179
M00043152B:H04	ES 208	530939	2090.A23.gz43_274259
M00043153B:B09	ES 208	519378	2090.B01.gz43_273908
M00043156C:E05	ES 208	528404	2090.C03.gz43_273941
M00043158A:F03	ES 208	522869	2090.C12.gz43_274085
M00043159A:C01	ES 208	526449	2090.C18.gz43_274181
M00043160B:E05	ES 208	521840	2090.D02.gz43_273926
M00043162D:E06	ES 208	453730	2090.D17.gz43_274166
M00043168C:F03	ES 208	446768	2090.F05.gz43_273976
M00043169A:F05	ES 208	453804	2090.F09.gz43_274040
M00043169A:H08	ES 208	524100	2090.F11.gz43_274072
M00043169C:D10	ES 208	453569	2090.F15.gz43_274136
M00043171B:G05	ES 208	523602	2090.G12.gz43_274089
M00043171D:G08	ES 208	450784	2090.G17.gz43_274169
M00043172A:D08	ES 208	401160	2090.G18.gz43_274185
M00043172C:B05	ES 208	234270	2090.G23.gz43_274265
M00043172C:G06	ES 208	453946	2090.H01.gz43_273914
M00043172D:H03	ES 208	128749	2090.H06.gz43_273994
M00043173B:F03	ES 208	453354	2090.H11.gz43_274074

Table 13

CloneID	ES No	ClusterID	SequenceName
M00043173C:B05	ES 208	453256	2090.H13.gz43_274106
M00043173C:D12	ES 208	520599	2090.H15.gz43_274138
M00043174A:G04	ES 208	454810	2090.H17.gz43_274170
M00043174B:B06	ES 208	413693	2090.H18.gz43_274186
M00043174C:C06	ES 208	526733	2090.H20.gz43_274218
M00043176C:A01	ES 208	525315	2090.I11.gz43_274075
M00043176C:E12	ES 208	454664	2090.I13.gz43_274107
M00042592A:H02	ES 209	539142	2092.A07.gz43_274486
M00042594C:D02	ES 209	455405	2092.A22.gz43_274726
M00042595A:B07	ES 209	447278	2092.B01.gz43_274391
M00042599D:E07	ES 209	455460	2092.B15.gz43_274615
M00042600D:B08	ES 209	455117	2092.B20.gz43_274695
M00042600D:E11	ES 209	452392	2092.B21.gz43_274711
M00042637C:E12	ES 209	536171	2092.B22.gz43_274727
M00042637D:B12	ES 209	455814	2092.B23.gz43_274743
M00042638D:G10	ES 209	455784	2092.C02.gz43_274408
M00042639D:H04	ES 209	455880	2092.C09.gz43_274520
M00042640C:C10	ES 209	455201	2092.C11.gz43_274552
M00042640D:D01	ES 209	455375	2092.C12.gz43_274568
M00043178C:C01	ES 209	454324	2090.I22.gz43_274251
M00043178C:G06	ES 209	529742	2090.I24.gz43_274283
M00043180C:B02	ES 209	452325	2090.J08.gz43_274028
M00043181C:C10	ES 209	526539	2090.J14.gz43_274124
M00043181C:F06	ES 209	529037	2090.J15.gz43_274140
M00043182B:C02	ES 209	454311	2090.J18.gz43_274188
M00043183A:C04	ES 209	454363	2090.K02.gz43_273933
M00043183C:B08	ES 209	525781	2090.K06.gz43_273997
M00043184D:A02	ES 209	447536	2090.K17.gz43_274173
M00043184D:G06	ES 209	432159	2090.K20.gz43_274221
M00043185B:D02	ES 209	527679	2090.L01.gz43_273918
M00043186C:A11	ES 209	524721	2090.L07.gz43_274014
M00043186D:A06	ES 209	524706	2090.L09.gz43_274046
M00043186D:B09	ES 209	425455	2090.L10.gz43_274062
M00043187B:G03	ES 209	530094	2090.L12.gz43_274094
M00043187C:E06	ES 209	528369	2090.L13.gz43_274110
M00043187D:H04	ES 209	530971	2090.L16.gz43_274158
M00043188D:B07	ES 209	525456	2090.L17.gz43_274174
M00043189C:F08	ES 209	528981	2090.M02.gz43_273935
M00043189D:B11	ES 209	452231	2090.M05.gz43_273983
M00043190A:B10	ES 209	454202	2090.M07.gz43_274015
M00043191C:G05	ES 209	404081	2090.M17.gz43_274175
M00043192B:H06	ES 209	453983	2090.M20.gz43_274223
M00043193C:G11	ES 209	523674	2090.N04.gz43_273968

Table 13

CloneID	ES No	ClusterID	SequenceName
M00043193C:H09	ES 209	452775	2090.N06.gz43_274000
M00043194A:G06	ES 209	453890	2090.N11.gz43_274080
M00043194C:A05	ES 209	453177	2090.N14.gz43_274128
M00043194D:E10	ES 209	289316	2090.N16.gz43_274160
M00043195D:A05	ES 209	518172	2090.N20.gz43_274224
M00043197D:H12	ES 209	454007	2090.O09.gz43_274049
M00043198A:F01	ES 209	453818	2090.O11.gz43_274081
M00043199A:F03	ES 209	452182	2090.O14.gz43_274129
M00043201D:D03	ES 209	454463	2090.P01.gz43_273922
M00043203B:E07	ES 209	528616	2090.P10.gz43_274066
M00043210C:E08	ES 209	454629	2090.P22.gz43_274258
M00043417A:H12	ES 209	539804	2092.C18.gz43_274664
M00043417B:F12	ES 209	455601	2092.C20.gz43_274696
M00043417C:F12	ES 209	447380	2092.C21.gz43_274712
M00043418A:A06	ES 209	422223	2092.C23.gz43_274744
M00043420C:C02	ES 209	455289	2092.D09.gz43_274521
M00043421C:G07	ES 209	449067	2092.D12.gz43_274569
M00043422B:C03	ES 209	455162	2092.D13.gz43_274585
M00043425C:H11	ES 209	539452	2092.E07.gz43_274490
M00043427C:E11	ES 209	544355	2092.E10.gz43_274538
M00043428C:A08	ES 209	531461	2092.E15.gz43_274618
M00043428D:C10	ES 209	455220	2092.E17.gz43_274650
M00043428D:E02	ES 209	536038	2092.E18.gz43_274666
M00043430D:C01	ES 209	455254	2092.E20.gz43_274698
M00043433A:F02	ES 209	537451	2092.F08.gz43_274507
M00043434A:H02	ES 209	452128	2092.F10.gz43_274539
M00043434B:D06	ES 209	535129	2092.F11.gz43_274555
M00043434B:E04	ES 209	452801	2092.F12.gz43_274571
M00043438B:E10	ES 209	404461	2092.G04.gz43_274444
M00043438C:D12	ES 209	535436	2092.G05.gz43_274460
M00043439C:D05	ES 209	535123	2092.G08.gz43_274508
M00043441D:A09	ES 209	455132	2092.G17.gz43_274652
M00043442A:D02	ES 209	534519	2092.G18.gz43_274668
M00043446B:H01	ES 209	456020	2092.H09.gz43_274525
M00043446C:E04	ES 209	455808	2092.H11.gz43_274557
M00043446C:E08	ES 209	400258	2092.H12.gz43_274573
M00043446C:E10	ES 209	456530	2092.H13.gz43_274589
M00043446C:G09	ES 209	547652	2092.H14.gz43_274605
M00043447A:F02	ES 209	455572	2092.H15.gz43_274621
M00043447C:A06	ES 209	454994	2092.H18.gz43_274669
M00043448B:E08	ES 209	455501	2092.H22.gz43_274733
M00043448C:D05	ES 209	456742	2092.H23.gz43_274749
M00043448C:G07	ES 209	538582	2092.H24.gz43_274765
M00043448D:H09	ES 209	451023	2092.I04.gz43_274446

Table 13

CloneID	ES No	ClusterID	SequenceName
M00043449C:H09	ES 209	448946	2092.I09.gz43_274526
M00043449D:A06	ES 209	447534	2092.I10.gz43_274542
M00043449D:E09	ES 209	215366	2092.I11.gz43_274558
M00043450B:C11	ES 209	456249	2092.I14.gz43_274606
M00043450B:H05	ES 209	456783	2092.I15.gz43_274622
M00043450C:F11	ES 209	454563	2092.I17.gz43_274654
M00043451A:B02	ES 209	456103	2092.I20.gz43_274702
M00043451B:D08	ES 209	448250	2092.I21.gz43_274718
M00043451C:H03	ES 209	447238	2092.I24.gz43_274766
M00043452D:D05	ES 209	452830	2092.J08.gz43_274511
M00043453B:C06	ES 209	456254	2092.J11.gz43_274559
M00043453B:F02	ES 209	546121	2092.J12.gz43_274575
M00043453C:A06	ES 209	446866	2092.J13.gz43_274591
M00043453D:D02	ES 209	543855	2092.J19.gz43_274687
M00043455B:G11	ES 209	546838	2092.K04.gz43_274448
M00043455C:G07	ES 209	450914	2092.K07.gz43_274496
M00043457C:B12	ES 209	454621	2092.K12.gz43_274576
M00043459A:B08	ES 209	541901	2092.K17.gz43_274656
M00043460D:C03	ES 209	534054	2092.L08.gz43_274513
M00043460D:H01	ES 209	539353	2092.L09.gz43_274529
M00043462A:H06	ES 209	455834	2092.L14.gz43_274609
M00043462C:E12	ES 209	536225	2092.L17.gz43_274657
M00043462D:C09	ES 209	415326	2092.L19.gz43_274689
M00043465B:G08	ES 209	162851	2092.M08.gz43_274514
M00043468C:D08	ES 209	455379	2092.M17.gz43_274658
M00043470C:A01	ES 209	456001	2092.N05.gz43_274467
M00043472A:E06	ES 209	536415	2092.N11.gz43_274563
M00043473C:B11	ES 209	37186	2092.N15.gz43_274627
M00043473D:D11	ES 209	452618	2092.N18.gz43_274675
M00043474C:H05	ES 209	455864	2092.N20.gz43_274707
M00043475C:G08	ES 209	446866	2092.N23.gz43_274755
M00043478B:D01	ES 209	450724	2092.O06.gz43_274484
M00043481A:B01	ES 209	532904	2092.O14.gz43_274612
M00043481A:G02	ES 209	402534	2092.O16.gz43_274644
M00043483B:G01	ES 209	455808	2092.O22.gz43_274740
M00043483B:G11	ES 209	455814	2092.O23.gz43_274756
M00043484C:E12	ES 209	455492	2092.P05.gz43_274469
M00043484D:H08	ES 209	455855	2092.P07.gz43_274501
M00043485A:A04	ES 209	452910	2092.P08.gz43_274517
M00043485A:C04	ES 209	450658	2092.P09.gz43_274533
M00043485B:C09	ES 209	455256	2092.P10.gz43_274549
M00043486B:D02	ES 209	543429	2092.P13.gz43_274597
M00043486C:D02	ES 209	543431	2092.P15.gz43_274629
M00043486C:F07	ES 209	456567	2092.P17.gz43_274661

Table 13

CloneID	ES No	ClusterID	SequenceName
M00043489C:H06	ES 209	446873	2092.P20.gz43_274709
M00043490A:F03	ES 209	456577	2092.P24.gz43_274773
M00063157B:B09	ES 209	464791	2102.A16.gz43_275283
M00063165C:F10	ES 209	449206	2116.A13.gz43_306321
M00063457A:B12	ES 209	558147	2102.B18.gz43_275316
M00063493D:G07	ES 209	644927	2102.F08.gz43_275160
M00063496B:F07	ES 209	558900	2102.F14.gz43_275256
M00063507B:B08	ES 209	621081	2102.G10.gz43_275193
M00063514B:E04	ES 209	498509	2102.H02.gz43_275066
M00063546B:F01	ES 209	730600	2116.D21.gz43_306452
M00063552B:B06	ES 209	89082	2116.E15.gz43_306357
M00063580A:A07	ES 209	649744	2116.I06.gz43_306217
M00063592B:E09	ES 209	378453	2116.J09.gz43_306266
M00063601D:C05	ES 209	379154	2102.I24.gz43_275419
M00063803B:F11	ES 209	402353	2103.B13.gz43_275620
M00063861C:F09	ES 209	544229	2103.E13.gz43_275623
M00063864A:H10	ES 209	380514	2103.E17.gz43_275687
M00063865A:F01	ES 209	427540	2103.E21.gz43_275751
M00063866B:H02	ES 209	643609	2103.F01.gz43_275432
M00063900B:B04	ES 209	730845	2103.H23.gz43_275786
M00063923B:A04	ES 209	402941	2103.J21.gz43_275756
M00063927A:B08	ES 209	554395	2103.K10.gz43_275581
M00063943B:G12	ES 209	377696	2103.M06.gz43_275519
M00063943B:G12	ES 209	377696	RTA22200255F.f.15.1.P
M00063970A:D09	ES 209	642263	2116.M13.gz43_306333
M00063980B:A08	ES 209	378447	2116.N09.gz43_306270
M00063988A:C02	ES 209	404453	2116.O22.gz43_306479
M00063994B:D10	ES 209	535955	2116.P08.gz43_306256
M00064064D:D11	ES 209	554032	2104.A21.gz43_297640
M00064077B:H02	ES 209	639578	2104.C08.gz43_297434
M00064081A:D04	ES 209	52644	2104.C19.gz43_297610
M00064082C:D11	ES 209	505275	2104.D01.gz43_297323
M00064085B:A12	ES 209	649035	2104.D11.gz43_297483
M00064101B:E12	ES 209	376559	2104.E08.gz43_297436
M00064104B:A01	ES 209	558382	2104.E17.gz43_297580
M00064107C:E03	ES 209	463217	2104.E23.gz43_297676
M00064112A:G03	ES 209	646187	2104.F12.gz43_297501
M00064131B:A09	ES 209	647586	2104.H11.gz43_297487
M00064147B:G08	ES 209	454622	2104.I20.gz43_297632
M00064194B:A02	ES 209	11379	2104.N01.gz43_297333
M00064195C:B02	ES 209	446397	2104.N03.gz43_297365
M00064196D:C10	ES 209	469367	2104.N05.gz43_297397
M00064201A:C08	ES 209	727888	2104.N13.gz43_297525
M00064220B:E01	ES 209	418763	2104.P04.gz43_297383

Table 13

CloneID	ES No	ClusterID	SequenceName
M00064307C:E12	ES 209	404453	2117.D05.gz43_306580
M00064371B:E01	ES 209	728687	2117.J15.gz43_306746
M00064383B:B04	ES 209	551960	2117.K19.gz43_306811
M00064387A:H05	ES 209	447461	2117.L05.gz43_306588
M00064391C:D09	ES 209	471364	2117.L18.gz43_306796
M00064394A:C02	ES 209	416886	2117.M03.gz43_306557
M00064446D:C08	ES 209	446397	2118.A09.gz43_307025
M00064534D:H04	ES 209	730238	2118.H24.gz43_307272
M00064592D:F05	ES 209	177443	2118.M09.gz43_307037
M00064601C:H06	ES 209	644919	2118.N03.gz43_306942

We Claim:

1. An isolated polynucleotide comprising a nucleotide sequence which hybridizes under stringent conditions to a sequence selected from the group consisting of SEQ ID NOS: 1-6010.

2. An isolated polynucleotide comprising at least 15 contiguous nucleotides of a nucleotide sequence having at least 90% sequence identity to a sequence selected from the group consisting of: SEQ ID NOS:1-6010, a degenerate variant of SEQ ID NOS:1-6010, an antisense of SEQ ID NOS:1-6010, and a complement of SEQ ID NOS:1-6010.

3. An isolated polynucleotide comprising at least 15 contiguous nucleotides of a nucleotide sequence selected from the group consisting of: SEQ ID NOS:1-6010, a degenerate variant of SEQ ID NOS:1-6010, an antisense of SEQ ID NOS:1-6010, and a complement of SEQ ID NOS:1-6010.

4. The isolated polynucleotide of claim 3, wherein the polynucleotide comprises at least 100 contiguous nucleotides of the nucleotide sequence.

5. The isolated polynucleotide of claim 3, wherein the polynucleotide comprises at least 200 contiguous nucleotides of the selected nucleotide sequence.

6. An isolated polynucleotide comprising a nucleotide sequence of at least 90% sequence identity to a sequence selected from the group consisting of: SEQ ID NOS:1-6010, a degenerate variant of SEQ ID NOS:1-6010, an antisense of SEQ ID NOS:1-6010, and a complement of SEQ ID NOS:1-6010.

7. The isolated polynucleotide of claim 6, wherein the polynucleotide comprises a nucleotide sequence of at least 95% sequence identity to the selected nucleotide sequence.

8. The isolated polynucleotide of claim 6, wherein the polynucleotide comprises a nucleotide sequence that is identical to the selected nucleotide sequence.

9. A polynucleotide comprising a nucleotide sequence of an insert contained in a clone deposited as ATCC Accession No. PTA-2027, PTA-2028, PTA-2029, PTA-2030, PTA-2031, PTA-2032, PTA-2033, PTA-2034, PTA-2035, PTA-2036, PTA-2037, PTA-2038, PTA-2039, PTA-2040, PTA-2041, PTA-2042, PTA-2043, PTA-2044, PTA-2045, PTA-2046, PTA-2047, PTA-2050, PTA-2051, PTA-2052, PTA-2053, PTA-2054, PTA-2055, PTA-2056, PTA-2057, PTA-2058, PTA-



2059, PTA-2060, PTA-2061, PTA-2062, PTA-2048, PTA-2049, PTA-2063, PTA-2064, PTA-2065, PTA-2066, PTA-2067, or PTA-2068.

10. An isolated cDNA obtained by the process of amplification using a polynucleotide  
5 comprising at least 15 contiguous nucleotides of a nucleotide sequence of a sequence selected from the group consisting of SEQ ID NOS:1-6010.

11. The isolated cDNA of claim 10, wherein the polynucleotide comprises at least 25  
10 contiguous nucleotides of the selected nucleotide sequence.

12. The isolated cDNA of claim 10, wherein the polynucleotide comprises at least 100  
contiguous nucleotides of the selected nucleotide sequence.

13. The isolated cDNA of claims 10, 11, or 12, wherein amplification is by polymerase  
15 chain reaction (PCR) amplification.

14. An isolated recombinant host cell containing the polynucleotide according to claims 1,  
2, 3, 6, 9, or 10.

15. An isolated vector comprising the polynucleotide according to claims claims 1, 2, 3, 6,  
20 9, or 10.

16. A method for producing a polypeptide, the method comprising the steps of:  
culturing a recombinant host cell containing the polynucleotide according to claims claims  
25 1, 2, 3, 6, 9, or 10., said culturing being under conditions suitable for the expression of an encoded polypeptide;  
recovering the polypeptide from the host cell culture.

17. An isolated polypeptide encoded by the polynucleotide according to claims claims 1, 2,  
30 3, 6, 9, or 10.

18. An antibody that specifically binds the polypeptide of claim 17.

19. A method of detecting differentially expressed genes correlated with a cancerous state of a mammalian cell, the method comprising the step of:

detecting at least one differentially expressed gene product in a test sample derived from a cell suspected of being cancerous, where the gene product is encoded by a gene comprising an  
5 identifying sequence of at least one of SEQ ID NOS:1-6010;

wherein detection of the differentially expressed gene product is correlated with a cancerous state of the cell from which the test sample was derived.

20. A library of polynucleotides, wherein at least one of the polynucleotides comprises the  
10 sequence information of the polynucleotide according to claims 1, 2, 3, 6, 9, or 10.

21. The library of claim 20, wherein the library is provided on a nucleic acid array.

22. The library of claim 20, wherein the library is provided in a computer-readable format.  
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23. A method of inhibiting tumor growth by modulating expression of a gene product, the gene product being encoded by a gene identified by a sequence selected from the group consisting of SEQ ID NOS:1-6010.  
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